Compilation of

ODOR and TASTE THRESHOLD VALUES DATA

W. H. Stahl, *editor*

DS 48

AMERICAN SOCIETY FOR TESTING AND MATERIALS

COMPILATION OF ODOR AND TASTE THRESHOLD VALUES DATA

Sponsored by

Committee E-18 on
Sensory Evaluation of Materials and Products
AMERICAN SOCIETY FOR TESTING AND MATERIALS

Edited by

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NOTE

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Foreword

This report is truly the result of a committee effort. The editor would like to express his sincere appreciation for the efforts of the very many members of ASTM Committee E-18, too numerous to list separately who, over the several years of preparation for this publication, have given freely of their time. A significant number of the compounds reported on have been given to us from the personal files of Dr. Birger Drake of the Swedish Institute for Food Preservation Research. In particular, he would like to extend special thanks to Mr. Harry McDaniel of the Proctor and Gamble Company for his extensive help in the keypunching of this information. Prof. John Powers of the University of Georgia was particularly helpful in assisting in the writing of the introduction.

Special thanks should go to four individuals outside of Committee E-18. Mr. Charles F. Eason of Assess, Inc., Bethesda, Md., has volunteered his time and has been the prime mover in programming and formating the computerization of this compilation. Mrs. Elizabeth Shields, Librarian for McCormick and Company has given much of her time in the many manuscript revisions and typing, and Dr. W. G. Galetto of the same company has spent many hours in coordinating and checking the data as it came piecemeal from the computer operation. Special thanks to Mr. William J. Wiswesser, the originator of the Wiswesser Line Notation for Chemical Nomenclature. He gave unstintingly of his time to translate our threshold chemicals to a line notation which has allowed us to build flexibility in a computer search that no other system would allow. We also thank him for his many suggestions, born out of his long experience in this field, that we have found extremely useful and undoubtedly has served to improve our compilation.

Related ASTM Publications

Basic Principles of Sensory Evaluation, STP 433 (1968), $5.75 (04-433000-36)

Manual on Sensory Testing Methods, STP 434 (1968), $4.24 (04-434000-36)

Correlation of Subjective-Objective Methods in the Study of Odors and Taste, STP 440 (1968), $5.75 (04-440000-36)

Review of Correlation of Objective-Subjective Methods in the Study of Odors and Tastes, STP 451 (1969), $2.00 (04-451000-36)

Contents

Introduction

Sensory problems are increasingly coming to the fore as man attempts to improve his food and stem the tide of water and air pollution. Basic data need to be collated and new knowledge acquired. One purpose of this publication is to tabulate the threshold values of odor and taste substances. The compilation also serves as the first step in determining gaps in knowledge.

Recent analytical advances such as gas chromatography and mass spectrometry have permitted the isolation and identification of compounds at rates and at concentration levels scarcely dreamed of a decade ago, but, nonetheless, man often is capable of responding to substances at even greater dilution levels. This, however, is not an irresolvable problem. Through suitable concentration means, the odor or the taste substance can be generally brought within the range of present analytical methods, but one has to be able to relate the chemical determination back to the level detectable by man. Knowledge of threshold values is thus of paramount importance. In the control of water and air pollution, threshold determinations are used to evaluate the effectiveness of different treatments and to establish the level of odor control necessary to make the product acceptable. Therefore, threshold data may be incorporated into regulatory specifications to define permissible odor limits, for example, from diesel-powered equipment or industrial waste discharges.

The flavor of foods is generally a complex mixture of compounds. The first step in evaluating the importance of different components is to obtain information about the threshold value of the pure material.

Data on threshold values are widely scattered in the literature. Probably even more is unpublished. The collecting of available data into one monograph for comparative purposes should serve two purposes, aside from those already mentioned. Hopefully, those possessing unpublished data will make it available either through publication or submission to an agency such as Committee E-18 of the American Society for Testing and Materials so that the data can be added to future editions of the present compilation. The second benefit relates to the problem the Committee encountered in assembling the data. There are questions as to the reliability of many of the values listed. Experimental procedures and precautions followed in obtaining the data were seldom described in unequivocal terms. Often critical conditions of testing were not described at all. The collating of information should serve not only to point out where there are gaps but also to make evident that standardization of test procedures and full reporting of test conditions are needed if data are to be fully trustworthy.

A clear consistent definition of threshold terminology is requisite to any effort to classify data. To this end, the appropriate terms contained in a previous Committee publication (ASTM Designation E 253-67 T) have been used. They are:

detection threshold, n—the minimum physical intensity detection by a subject where he is not required to identify the stimulus but just detect the existence of the stimulus.

difference threshold, n—the smallest physical difference between two stimuli which can be correctly identified as sensorially different. (The British Standard Institution puts it more simply: the smallest change in concentrations of a substance required to give a perceptible change.)

just noticeable difference or JND, n—See **difference threshold.**

recognition threshold, n—the minimum physical intensity detected by a subject where he is required to identify the stimulus in some manner. (The British Standards Institution puts it more simply: the lowest concentration at which a substance is correctly identified.)

supra-threshold, n—above the threshold. Also called supraliminal.

threshold, absolute, n—the minimum physical intensity of stimulus that elicits a response a specified percent of the time. Synonym limen.

threshold, terminal, n—(1) the maximum intensity of a stimulus that will produce a given type of sensory experience without change in modality. (2) intensity of stimulation above which increase in intensity cannot be detected. (The British Standards Institution: the concentrations of a substance above which changes in concentration are not perceptible.)

In the foregoing list, the presence of three terms (namely, detection threshold, recognition threshold, and absolute threshold) to refer to absolute sensitivity does not mean that there are three different kinds of absolute sensitivity. The term absolute threshold has a more general meaning than the other two and may be applied both to the detection task and to the recognition task. Consequently, we can measure an absolute threshold for detection and an absolute threshold for recognition. In practice, it has been more common for investigators to measure absolute sensitivity for detection than absolute sensitivity for recognition. This practice has caused many to use the terms detection threshold and absolute threshold interchangeably. Probably little harm has resulted from such usage, since those who have measured the absolute threshold for recognition have usually not reported their values as simply "absolute threshold."

It might be interesting to note how the total number of threshold values given in this compilation are divided between modality (odor and taste) and further subdivision of threshold type (detection, recognition, and others.)

Threshold Data

(1210 Values as of August 1972)

	No.	*%*
I. Odor Threshold	765	63.7
(*a*) Detection	657	84.8
(*b*) Recognition	106	13.7
(*c*) Others	12	1.5
II. Taste Threshold	435	36.3
(*a*) Detection	374	86.0
(*b*) Recognition	40	9.2
(*c*) Others	21	4.8

Certain recommendations for publishing useful values by future authors are suggested. The majority of the values reported in this compilation have been obtained under less than desirable conditions. While this study does not purport to tell the analyst specifically how to determine sensory values, certain precautions are recommended.

Detection thresholds are critically dependent on three main things: (1) sensitivity and ability of the panelists; (2) purity and stability of the compound; and (3) contamination of equipment and space with background odors. Unfortunately, it was generally difficult or impossible to evaluate the effect of these factors from the threshold values reported in the literature. Journals should require future authors to specify the conditions and procedures by which their data were obtained.

The Committee cannot assure that all the values taken from the literature as they appear in this compilation are free of error, particularly where details in the publication are rather vague, and also in those cases where the original reference could not be checked. Reasonable care was exercised.

This edition of the compilation hopefully covers journals through August 1972. It is also readily recognized that this first attempt at compilation will fall short of the ultimate format, and it is hoped that subsequent revisions will correct this. A Task Force of the Committee will continue to collect newly published threshold information, and also add in information already in print but missed for any of a variety of reasons in the initial search. We suggest that the authors of new data (or missing data, or misinformation) send these data to the committee by means of the blank tear-out form attached at the end of this compilation. We also solicit your personal suggestions for improvement or expansion of the data.

Description of the Compilation

The original data-gathering card used in the review is shown in Fig. 1 on p. 248. The data listed next was obtained from the original publication.

(*a*) Name of compound—at this writing, the nomenclature does not wholly follow ACS-IUPAC rules, nor use trivial or common names, but is a mixture of both. However, since the total number of compounds is relatively small, it was felt that this will not work an undue hardship on the reader.

(*b*) Synonym—if one exists.

(*c*) Physical data—these data were usually not given in the publication from which the threshold value was taken. They have been supplied, when readily available, by the "reviewer" to facilitate comparison of values. The molecular formula is given. This allows one way for electronic data processing (EDP) searching for compounds by composition.

(*d*) Purity—for obvious reasons; only data for pure compounds have real value.

(*e*) Media—the matrix in which the stimulant was dispersed or dissolved.

(*f*) Temperature—for weight/volume, molecules/volume, and molarity, the temperature should be specified.

(*g*) Threshold value, either detection or recognition or other. While the value as reported in the original article has been recorded, space was allowed for possible conversion into other units for comparative purposes. At best, it could contain

1. Volume ratios: vol/vol (fractional); percent by vol; ppm by vol; ppb by vol.
2. Weight ratios (rare): wt/wt (fractional), percent by weight, etc.
3. Weight/volume ratios: mg/m^3; mg/ft^3; lb/10^6; etc.
4. Molar or molecular ratios: molecules/cm^3; molarity (moles/liter), etc.
5. Absolute quantities: minimum detectable quantity (molecules, grams, etc.).
6. Partial pressure: minimum partial pressure for detection (mm Hg; torr; millibars, etc.).

The following is a list of conversion factors given here for the convenience of users of this compilation to convert any values as given in the original publication into terms useful to him. (See Table A).

TABLE A—*Concentration conversion factors.*

To Convert From	*To*	*Multiply By*
Gases in gases		
1. Micromoles of gas per mole of gas	ppm by vol.	1
2. Percent by volume	ppm by vol.	10^4
3. Milligrams of substance per liter of air (at 25C and 760 mm Hg pressure)	ppm by vol.	$\frac{24{,}450}{\text{mol. wt.}}$
4. Parts per billion by volume (ppb)	ppm	10^3
Liquids and solid particles in gas		
5. Micrograms per cubic meter	milligrams per liter	10^{-6}
6. Pounds per million cubic feet	milligrams per liter	0.01602
Gases, liquids, and solids in liquids		
7. Milligrams per liter (where specific gravity of dispersion medium is 1.00)	ppm by weight	1
8. Moles per liter	milligrams per liter	mol. wt. (10^3)

9. To correct the volume of a quantity of gas from an initial condition, V_1, P_1, T_1, to a final condition V_2, T_2, P_2, use the ideal gas relationship $V_2 = V_1 \left(\frac{P_1}{P_2}\right) \left(\frac{T_2}{T_1}\right)$ where absolute pressure (not gage pressure) and absolute temperatures are used.

To correct any expression of gas concentration from an initial condition C_1, T_1, P_1, to a final condition C_2, T_2, P_2, use the inverse relationship $C_2 = C_1 \left(\frac{P_2}{P_1}\right) \left(\frac{T_1}{T_2}\right)$ where

C = concentration in miligrams per liter,
T = absolute temperature in deg K, and
P = absolute pressure in mm of Hg of the sampled stream.

For a more extensive Table of Conversion Factors for units of concentration, refer to Recommended Practice for Conversion Units and Factors Relating to Atmospheric Analysis (ASTM Designation D 1914-68).

(*h*) Methodology—this deals primarily with the method of physical presentation of the stimulus: flask, hood, mask, nozzle, pulse, continuous stimulus, or other specified conditions. The basis of experimental design of the threshold determination methodolgy is noted. Different procedures, for example, single-stimulus presentation with yes or no responses, using ascending, random, or some other order of stimuli presentation; ascending concentration series with inserted blanks and ED_{50} statistics ("quantial response") for the data evaluation (cf. Sinsheimer, *Food Research,* Vol. 24, 1959 p. 445, Ellis, *Food and Science and Technology, Proceedings,* First International Congress of Food Science and Technology, Gordon and Breach, Science Publishers, Inc. Vol. 3, 1965; pp. 307-324); ascending concentration series using triangle test at each concentration level (ASTM D 1292-617 (1962)) or descending concentration series are noted whenever there were assurances of the method used. The required frequency of detectability (50 percent, or sometimes 66, 70, or 75 percent) also is given, if known.

(*i*) Journal reference—

(*j*) Original reference not verified—an attempt was made to trace all references back to the original source. This could not be done in many cases. The data that has been verified against the original publication is recorded.

(*k*) Wiswesser Line Notation (not an original data card, but added later)—an alphanumerical code in computer language describing the structure of any organic molecule. This device allows unambiguous searching into other "data banks."

There are many methods used in the determination of odor and taste threshold values. The following is an illustration of one for taste. It is taken from the Manual on Sensory Testing Methods (ASTM STP 434, 1968, p. 61).

I. Threshold Determination

a. This graphic method for determining a difference or absolute threshold is one which serves as a basis for the variations seen in many of the psychophysical methods.

b. A series of stimuli have been presented on several occasions and a judgment has been made each time on whether the stimulus was noticed. If the stimulus was noted, one assigns a value of 1; if the stimulus was not noticed, a value of 0 is assigned. This gives the following table.

Occasions	Stimulus Values			
	1	2	3	4
1	0	0	1	1
2	0	1	0	1
3	0	1	1	1
4	0	0	0	1
5	0	1	1	0
6	1	0	0	1
7	0	0	0	1
8	0	1	1	1
9	0	0	1	1
10	0	0	1	1
Frequence noticed	1	4	6	9
Proportion	0.1	0.4	0.6	0.9

Stimulus 1 was noticed only once in ten occasions, while stimulus 4 was noted 9 out of 10 times.

c. Procedure

(1) Determine the proportion of times each stimulus was noticed. This is shown in the last row of the table.

(2) Draw a diagram showing proportions on the y-axis and the stimulus values on the x-axis. Plot the proportions for the stimulus values and draw a smooth curve through the points.

(3) Note where the line crosses the 0.50 point on the y-axis and draw a straight line from the curve to the x-axis. The point on the x-axis denotes the stimulus value which is at the absolute threshold, that is, the stimulus value which is noticed 50 percent of the time.

d. The difference threshold is defined as that stimulus noticed in a specified number of trials (often 60%).

The reader should keep in mind the comments made about the distinction between absolute-threshold and detection-threshold values. The percentage of correct identification should be specified and whether or not the percentage correct responses was statistically significant according to the type of test used. In a paired test, for example, a statistically significant level cannot be as low as 50 percent, whereas for the triangular test, once the replication exceeds approximately 40, correct identification may be below 50 percent and still be statistically valid.

References

Explanation of CODEN and Other Reference Abbreviations

The CODEN abbreviations for journal or periodical titles is defined as a five character code designating the title of a specific serial publication. A complete listing for CODEN titles (109 000 codes) is published by ASTM and is designated as DS 23B.

Those journals in which threshold data were found are listed on the accompanying Table. In the event that data is abstracted from a book, the Code BOOK is entered in the Journal field, and a special code is entered in the Volume field. Those other than periodicals and books, such as monographs, special papers, personal communications have also been assigned a unique code that depicts one of the above classes.

CODEN

Journals

ACSAA Acta Chemica Scandinavica

AFECA Annales des Falsifications et de l' Expertise Chimique

AJCNA American Journal of Clinical Nutrition

ANYAA Annals of the New York Academy of Sciences

APRCA American Perfumer and Cosmetics

BIZEA Biochemische Zeitschrift

CHINA Chemistry and Industry (London)

CJREA Canadian Journal of Research

FOREA Food Research

FOTCA Food Technology (London)

FOTEA Food Technology (Champaign, Ill.)

IECHA Industrial and Engineering Chemistry

JAFCA Journal of Agricultural and Food Chemistry

JAOCA Journal of the American Oil Chemists' Society

JAWWA Journal of the American Water Works Association

JDRSA Journal of Dairy Research

JDSCA Journal of Dairy Science

JFDSA Journal of Food Science

JGCRA Journal of Gas Chromatography

JPCAA Journal of Air Pollution Control Association

JSFAA Journal of the Science of Food and Agriculture

JWPFA Journal of the Water Pollution Control Federation

NATUA Nature (London)

NOFRA Rapport Nordiske Fettharskningssymposium

PEORA Perfumery and Essential Oil Record

PEPSB Perception and Psychophysics

RCHEA Recherches

Monographs and Papers

MONO BMAG Fieldner, A. C., et al, 1931, U. S. Bureau of Mines and American Gas Association Monograph #4, American Gas Association.

MONO SCI1 Science Monograph #1, 1957, Molecular Structure and Organoleptic Quality.

PAPERACS Patton, S., 1957, Abstract of Papers, 131st Meeting of American Chemical Society, Miami, Fla.

PAPERBMTP Bureau of Mines Technical Paper 480, 1930, Intensities of Odors and Irritating Effects of Warning Agents of Inflammable and Poisonous Gases.

PAPERPHR Dalla Valle, J. M. and Dudley, H. C., 1939, Public Health Report 54(1).

REPT TT61 Cherkinski, W., USSR, Literature on Water Supply and Pollution Control, Book 5: Protection of Natural Water Basins Against Pollution with Industrial Waste Water, B. S. Levene, translator.
Available from U. S. Department of Commerce, Office of Technical Service, Washington, D.C., TT 61-31601-5.

Personal Communication

PERCOLAND From Derek G. Land, Research Institute, Earlheim Lab., Recreation Road, Norwich, Norway 26G, to W. H. Stahl, 1968.

PERCOMIDD From F. M. Middleton, Taft Sanitary Engineering Center, U. S. Department of Health, Education, and Welfare, Cincinnati, Ohio, 1956.

PERCOTURK From Amos Turk, 7 Tarrywhile Lake Drive, Danbury, Conn., 1967.

Books

BOOKA Prentiss, A. M., 1937, *Chemicals of War,* McGraw-Hill, New York.

BOOKB Pfaffmann, C., 1959, *Handbook of Physiology,* American Physiological Society.

BOOKC Moncrieff, R. W., 1951, *Chemical Senses,* L. Hill, London.

BOOKD Little, Arthur D., Inc., 1958, *Flavor Research and Food Technology,* Reinhold Publishing Corp., New York.

BOOKE Amerine, M. A. et al, 1965, *Principles of Sensory Evaluation of Food,* Academic Press, New York.

TABLE 1
Alphabetical Listing

The nomenclature does not wholly follow ACS-IUPAC rules, nor use trivial or common names, but is a mixture of both.

The CODE number is simply an acquisition number which is common to all three Tables in this compilation. The CODE in this Table allows the reader to readily access to the data in Table 2. Note that a sequential listing by CODE (acquisition) number is given in this same Data-Bibliography Table.

Greek prefixes have been "computerized" by using the corresponding Latin letter punctuated with an ampersand mark. For example, A& equals alpha, B& equals beta, G& equals gamma, W& is omega. Another set of prefix symbols covers O@, M@ and P@ or orthos, meta and para isomers, respectively. Fuller details on the "computer-oriented names" can be found in the papers by A. J. Barnard, Jr., C. T. Kleppinger, and W. J. Wiswesser, *Journal of Chemical Documentation,* Vol. 6, 1966, pp. 41-48, 48-57.

0058 ACETALDEHYDE
0295 ACETALDEHYDE
0407 ACETALDEHYDE
0408 ACETALDEHYDE
0409 ACETALDEHYDE
0588 ACETALDEHYDE
0589 ACETALDEHYDE
0666 ACETALDEHYDE
0877 ACETALDEHYDE
0929 ACETALDEHYDE
0984 ACETALDEHYDE
1038 ACETALDEHYDE
0119 ACETIC ACID
0144 ACETIC ACID
0146 ACETIC ACID
0462 ACETIC ACID
0667 ACETIC ACID
0699 ACETIC ACID
0743 ACETIC ACID
0982 ACETIC ACID
0983 ACETIC ACID
0112 ACETONE
0281 ACETONE
0366 ACETONE
0669 ACETONE
0976 ACETONE
0663 ACETOPHENONE
0022 ACETYL BROMIDE
1188 ACETYL FORMOIN
1196 2-ACETYLFURAN
1197 2-ACETYLPYRROLE
0036 ACROLEIN
0624 ACROLEIN
0670 ACROLEIN
0736 ACROLEIN
0878 ACROLEIN
0930 ACROLEIN
1026 ACROLEIN
0113 ACRYLONITRILE
0671 ACRYLONITRILE
0018 *AKROL* -MIXED TERPENES
0268 *AKROL* -MIXED TERPENES
0879 *AKROL* -MIXED TERPENES
0856 A&-ALANINE
0208 ALDRIN
0039 ALLYL ALCOHOL
0744 ALLYL ALCOHOL
0880 ALLYL ALCOHOL
0934 ALLYL ALCOHOL
0057 ALLYL DISULFIDE
0882 ALLYL DISULFIDE
0954 ALLYL DISULFIDE
0019 ALLYL ISOCYANIDE
0270 ALLYL ISOCYANIDE
0883 ALLYL ISOCYANIDE
0931 ALLYL ISOCYANIDE
0056 ALLYL ISOTHIOCYANATE
0257 ALLYL ISOTHIOCYANATE
0262 ALLYL ISOTHIOCYANATE
0884 ALLYL ISOTHIOCYANATE
0935 ALLYL ISOTHIOCYANATE
1069 ALLYL ISOTHIOCYANATE
0055 ALLYL MERCAPTAN
0263 ALLYL MERCAPTAN
0885 ALLYL MERCAPTAN
0932 ALLYL MERCAPTAN
0054 ALLYL SULFIDE
0247 ALLYL SULFIDE
0886 ALLYL SULFIDE
0951 ALLYL SULFIDE
0038 ALLYLAMINE
0272 ALLYLAMINE
0881 ALLYLAMINE
0933 ALLYLAMINE
0676 AMMONIA
0887 AMMONIA
0452 AMMONIUM CHLORIDE
0040 AMYLENE
0888 AMYLENE
0938 AMYLENE
0115 ANILINE
0403 ANILINE
0404 ANILINE
0677 ANILINE
0531 ARACHIDIC ACID
0451 ARBUTIN
0872 ARGININE
0869 ARGININE HYDROCHLORIDE
0865 ASPARTAMINE
0862 ASPARTIC ACID
0424 ASPIRIN
0450 ATROPINE
0051 BENZALDEHYDE
0411 BENZALDEHYDE
0412 BENZALDEHYDE
0413 BENZALDEHYDE
0418 BENZALDEHYDE
0620 BENZALDEHYDE
0893 BENZALDEHYDE
0940 BENZALDEHYDE
1061 BENZALDEHYDE
0111 BENZENE
0429 BENZENE
0678 BENZENE
0194 BENZENE HEXACHLORIDE
0196 BENZENE HEXACHLORIDE
0198 A&-BENZENE HEXACHLORIDE
0197 B&-BENZENE HEXACHLORIDE
0195 G&-BENZENE HEXACHLORIDE
0027 BENZENETHIOL
0105 BENZENETHIOL
0240 BENZENETHIOL
0389 BENZENETHIOL
0390 BENZENETHIOL
0920 BENZENETHIOL
0965 BENZENETHIOL
1193 BENZOIC ACID
0638 BENZYL ALCOHOL
0042 BENZYL CHLORIDE
0679 BENZYL CHLORIDE
0894 BENZYL CHLORIDE
0050 BENZYL MERCAPTAN
0241 BENZYL MERCAPTAN
0895 BENZYL MERCAPTAN
0942 BENZYL MERCAPTAN
0680 BENZYL SULFIDE

0840 CITRIC ACID
0842 CITRIC ACID
1118 CITRIC ACID
1119 CITRIC ACID
1120 CITRIC ACID
0488 COAL TAR
0557 COCAINE
0558 COLCHICINE
0193 COUMAPHOS
0065 COUMARIN
0264 COUMARIN
0559 COUMARIN
0806 COUMARIN
0807 COUMARIN
0808 COUMARIN
0904 COUMARIN
0949 COUMARIN
0649 CREOSOL
1100 CREOSOL
1101 CREOSOL
0127 M@-CRESOL
0128 O@-CRESOL
0740 P@-CRESOL
0066 CROTONALDEHYDE
0147 CROTONALDEHYDE
0260 CROTONALDEHYDE
0826 CROTONALDEHYDE
0946 CROTONALDEHYDE
0988 CROTONALDEHYDE
0013 CROTYL MERCAPTAN
0243 CROTYL MERCAPTAN
0903 CROTYL MERCAPTAN
0950 CROTYL MERCAPTAN
0796 CUMENE
0003 CYANODIPHENYLARSINE
0067 CYANOGEN CHLORIDE
0324 CYCLOHEXANOL
1070 CYCLOHEXANONE
1016 CYCLOPENTYL ACETATE
0191 D D T
10332 T,4T-DECADIENAL
10322 T,7C-DECADIENAL
09992 T,7T-DECADIENAL
0035 D&-DECALACTONE
0274 D&-DECALACTONE
0694 D&-DECALACTONE
0622 G&-DECALACTONE
1043 G&-DECALACTONE
0170 DECANAL
0224 DECANAL
0330 DECANAL
0358 DECANAL
0359 DECANAL
0794 DECANAL
0135 DECANOIC ACID
0137 DECANOIC ACID
0625 DECANOIC ACID
0724 DECANOIC ACID
1048 DECANOIC ACID
0342 2-DECANONE
0385 2-DECANONE
0668 2-DECANONE
0851 2-DECENAL
1034 2T-DECENAL
1206 1-DECENE
1102 1-DECYNE
1210 1-DECYNE
0081 DIACETYL
0082 DIACETYL
0388 DIACETYL
0627 DIACETYL
0631 DIACETYL
0635 DIACETYL
0730 DIACETYL
0763 DIACETYL
0792 DIACETYL
0793 DIACETYL
1039 DIACETYL
1040 DIACETYL
1041 DIACETYL
1042 DIACETYL
0190 DICHLOROACETIC ACID
0311 1,3-DICHLOROBUTENE-2
0310 X-DICHLOROCYCLOHEXANE
0658 2,2*-DICHLOROETHYL ETHER
0017 DICHLOROETHYLARSINE
0908 TR-DICHLOROETHYLENE
0657 2,2*-DICHLOROISOPROPYL ETHER
0031 DICHLOROMETHYLARSINE
0102 2,4-DICHLOROPHENOL
0215 2,4-DICHLOROPHENOXYACETIC ACID
0309 S,S-DIETHYL DITHIOPHOSPHATE
0034 DIETHYL SELENIDE
0560 DIGALLIC ACID
0953 DIISOAMYL SULFIDE
0593 2,6-DIMETHOXYPHENOL
0594 2,6-DIMETHOXYPHENOL
0595 2,6-DIMETHOXYPHENOL
0088 DIMETHYL DISULFIDE
0089 DIMETHYL DISULFIDE
0176 DIMETHYL DISULFIDE
0222 DIMETHYL DISULFIDE
0277 DIMETHYL DISULFIDE
0288 DIMETHYL DISULFIDE
0592 DIMETHYL DISULFIDE
1015 DIMETHYL DISULFIDE
1023 DIMETHYL DISULFIDE
0010 DIMETHYL TRITHIOCARBONATE
0259 DIMETHYL TRITHIOCARBONATE
1067 5,5-DIMETHYL-1,3-CYCLOHX%DIONE
0453 1,5-DIMETHYL-2-PH-3-PYRAZOLONE
1135 2,5-DIMETHYL-3-ETHYLPYRAZINE
1136 2,5-DIMETHYL-3-ETHYLPYRAZINE
1137 2,6-DIMETHYL-3-ETHYLPYRAZINE
1138 2,6-DIMETHYL-3-ETHYLPYRAZINE
0688 N,N-DIMETHYLACETAMIDE
0129 DIMETHYLAMINE
0673 DIMETHYLAMINE
0308 4,4-DIMETHYLDIOXANE-1,3
0307 DIMETHYLDITHIOPHOSPHORIC A
1123 2,5-DIMETHYLPYRAZINE
1124 2,5-DIMETHYLPYRAZINE
1125 2,6-DIMETHYLPYRAZINE
1126 2,6-DIMETHYLPYRAZINE
1109 3,4-DIMETHYLTHIOPHENE
0618 D&-DODECALACTONE

1172 GERANYLACETONE
0286 GLUCOSE
0564 GLUCOSE
0837 GLUCOSE
0847 GLUCOSE
0565 GLUTAMIC ACID
0566 GLUTAMIC ACID
0863 GLUTAMIC ACID
0859 GLUTAMINE
0004 GLYCERCL
0305 GLYCEROL
0481 GLYCEROL
0857 GLYCINE
0299 GRAPE SEED TANNIN
0642 GUAIACOL
0643 GUAIACOL
0644 GUAIACOL
0219 GUTHION
0221 HEPTACHLOR
0633 HEPTADECANOIC ACID
07792 T,4C-HEPTADIENAL
07822 T,4T-HEPTADIENAL
1216 1,4-HEPTADIENE
0751 G&-HEPTALACTONE
0227 HEPTANAL
0367 HEPTANAL
0426 HEPTANAL
0741 HEPTANAL
0788 HEPTANAL
0617 HEPTANOIC ACID
0167 1-HEPTANOL
0333 1-HEPTANOL
0369 1-HEPTANOL
0727 1-HEPTANOL
0732 1-HEPTANOL
1066 1-HEPTANOL
0656 4-HEPTANOL
0083 2-HEPTANONE
0084 2-HEPTANONE
0283 2-HEPTANONE
0648 2-HEPTANONE
0654 2-HEPTANONE
0773 2-HEPTANONE
1055 2-HEPTANONE
0161 2-HEPTENAL
0774 2-HEPTENAL
0825 2-HEPTENAL
0783 2T-HEPTENAL
0777 4C-HEPTENAL
0776 4T-HEPTENAL
1230 1-HEPTENOL-3
0188 HEPTYL ISOBUTYRATE
0160 HEPTYL PROPIONATE
0327 HEXACHLOROETHANE
07852 T,4T-HEXADIENAL
1211 1,3-HEXADIENE
1212 1,5-HEXADIENE
12142 C,4T-HEXADIENE
12152 T,4T-HEXADIENE
0756 G&-HEXALACTONE
0059 HEXANAL
0078 HEXANAL
0079 HEXANAL
0166 HEXANAL
0228 HEXANAL
0290 HEXANAL
0334 HEXANAL
0368 HEXANAL
0590 HEXANAL
0731 HEXANAL
0738 HEXANAL
0750 HEXANAL
0140 HEXANOIC ACID
0141 HEXANOIC ACID
0446 HEXANOIC ACID
0616 HEXANOIC ACID
0710 HEXANOIC ACID
0711 HEXANOIC ACID
0772 HEXANOIC ACID
0990 HEXANOIC ACID
0991 HEXANOIC ACID
1054 HEXANOIC ACID
0577 1-HEXANOL
0789 1-HEXANOL
1178 1-HEXANOL
0173 2-HEXENAL
0775 2-HEXENAL
0824 2-HEXENAL
0784 2T-HEXENAL
0786 3C-HEXENAL
1163 3C-HEXENAL
0787 3T-HEXENAL
1203 1-HEXENE
1167 3C-HEXENOL-1
1229 1-HEXENOL-3
0581 HEXYL ACETATE
0159 HEXYL ISOBUTYRATE
0181 HEXYL PROPIONATE
1022 HEXYL PROPIONATE
1208 1-HEXYNE
0864 HISTIDINE
0868 HISTIDINE
1021 HUMULENE
0574 HYDROGEN CHLORIDE
0575 HYDROGEN CHLORIDE
0697 HYDROGEN CHLORIDE
0836 HYDROGEN CHLORIDE
0074 HYDROGEN CYANIDE
0075 HYDROGEN SULFIDE
0430 HYDROGEN SULFIDE
0698 HYDROGEN SULFIDE
0912 HYDROGEN SULFIDE
1099 3-HYDROXY-2-METHYL-4-PYRONE
1189 3-HYDROXY-2-PYRONE
1198 2-HYDROXYACETYLFURAN
1199 5-HYDROXYMETHYLFURFURAL
0640 15-HYDROXYPENTADECANOLACTONE
0854 HYDROXYPROLINE
1092 IODOFORM
0410 IONONE, A&-
0414 IONONE, A&-
1056 IONONE, A&-
0090 IONONE, B&-
0345 IONONE, B&-
0347 IONONE, B&-
1035 ISOBUTENE

0374 ISOBUTYL ACETATE
0985 ISOBUTYL ALCOHOL
1177 ISOBUTYL ALCOHOL
0152 ISOBUTYL ISOBUTYRATE
0781 ISOBUTYL MERCAPTAN
1176 2-ISOBUTYLTHIAZOLE
0175 ISOBUTYRALDEHYDE
0821 ISOBUTYRALDEHYDE
1183 ISOBUTYRIC ACID
0873 ISOLEUCINE
0207 ISOOCTYL 2,4-D
0265 ISOPENTYL ACETATE
0889 ISOPENTYL ACETATE
0936 ISOPENTYL ACETATE
1017 ISOPENTYL ALCOHOL
1018 ISOPENTYL ALCOHOL
1019 ISOPENTYL ALCOHOL
1058 ISOPENTYL ALCOHOL
0266 ISOPENTYL ISOVALERATE
0890 ISOPENTYL ISOVALERATE
0937 ISOPENTYL ISOVALERATE
0180 ISOPENTYL MERCAPTAN
0246 ISOPENTYL MERCAPTAN
0891 ISOPENTYL MERCAPTAN
0926 ISOPENTYL MERCAPTAN
0021 ISOPENTYL SULFIDE
0892 ISOPENTYL SULFIDE
0326 ISOPRENE
0205 ISOPROPYL 2,4-CL2-PHO-AC@
0206 ISOPROPYL 2,4-CL2-PHO-AC@
1068 ISOPROPYLACETONE
0077 ISOVALERALDEHYDE
0091 ISOVALERALDEHYDE
0174 ISOVALERALDEHYDE
0771 ISOVALERALDEHYDE
0820 ISOVALERALDEHYDE
1184 ISOVALERIC ACID
0134 LACTIC ACID
0296 LACTIC ACID
0466 LACTIC ACID
0492 LACTIC ACID
0841 LACTIC ACID
0845 LACTIC ACID
0852 LACTIC ACID
0447 LACTOSE
0172 LAURALDEHYDE
0726 LAURALDEHYDE
0819 LAURALDEHYDE
0997 LAURALDEHYDE
0136 LAURIC ACID
0628 LAURIC ACID
1049 LAURIC ACID
0876 LEUCINE
1194 LEVULINIC ACID
1173 LIMONENE
0770 LINALOOL
1046 LINOLEIC ACID
0567 LITHIUM CHLORIDE
0855 LYSINE HYDROCHLORIDE
0569 MAGNESIUM CHLORIDE
0570 MAGNESIUM SULFATE
0204 MALAGRAN
0220 MALATHION
0117 MALIC ACID
0293 MALIC ACID
0465 MALIC ACID
0491 MALIC ACID
0839 MALIC ACID
0844 MALIC ACID
1112 MALIC ACID
1113 MALIC ACID
1114 MALIC ACID
0571 MALTOSE
0647 DL-MENTHONE
0110 2-MERCAPTOETHANOL
0131 MESITYLENE
0048 METHANETHIOL
0177 METHANETHIOL
0232 METHANETHIOL
0275 METHANETHIOL
0287 METHANETHIOL
0346 METHANETHIOL
0360 METHANETHIOL
0705 METHANETHIOL
0914 METHANETHIOL
0961 METHANETHIOL
0998 METHANETHIOL
0700 METHANOL
0080 METHIONAL
0098 METHIONAL
0223 METHIONAL
1001 METHIONAL
0870 METHIONINE
0795 2-METHOXY-3-ISOBUTYLPYRAZINE
0213 METHOXYCHLOR
0049 METHYL ANTHRANILATE
0742 METHYL ANTHRANILATE
0913 METHYL ANTHRANILATE
0913 METHYL ANTHRANILATE
0960 METHYL ANTHRANILATE
0701 METHYL CHLORIDE
0322 METHYL DEMETON
0062 METHYL ETHYL KETONE
0289 METHYL ETHYL KETONE
0703 METHYL ETHYL KETONE
1013 METHYL ETHYL KETONE
0189 METHYL HEPTANOATE
0613 METHYL IONONE EXTRA
1072 METHYL ISONITRILE
1073 METHYL ISONITRILE
1074 METHYL ISONITRILE
1075 METHYL ISONITRILE
0833 METHYL ISOTHIOCYANATE
0749 METHYL METHACRYLATE
0203 METHYL PARATHION
1107 METHYL PROPENYL DISULFIDE
0284 METHYL SALICYLATE
0433 METHYL SALICYLATE
0434 METHYL SALICYLATE
0650 METHYL SALICYLATE
0768 METHYL SALICYLATE
0769 METHYL SALICYLATE
0024 METHYL SULFIDE
0025 METHYL SULFIDE
0047 METHYL SULFIDE
0278 METHYL SULFIDE

0356 METHYL SULFIDE
0357 METHYL SULFIDE
0357 METHYL SULFIDE
0384 METHYL SULFIDE
0506 METHYL SULFIDE
0725 METHYL SULFIDE
0729 METHYL SULFIDE
0924 METHYL SULFIDE
0939 METHYL SULFIDE
1000 METHYL SULFIDE
1014 METHYL SULFIDE
0072 METHYL THIOCYANATE
0251 METHYL THIOCYANATE
0150 METHYL THIOHEPTANOATE
0151 METHYL THIOHEXANOATE
1234 METHYL VINYL KETONE
0156 2-METHYL 2-METHYLBUTYRATE
0154 METHYL 4-DECENOATE
0153 METHYL 4,8-DECADIENOATE
1020 METHYL 6-DECENOATE
0373 3-METHYL-2-BUTYL ACETATE
1187 5-METHYL-2-FURFURAL
1171 2-METHYL-2T,4-HEPTADIENONE-6
0109 2-METHYL-5-ETHYLPYRIDINE
0661 2-METHYL-5-ETHYLPYRIDINE
0108 2-METHYL-5-VINYLPYRIDINE
0132 METHYLAMINE
0321 METHYLAMINE
0674 METHYLAMINE
0660 A&-METHYLBENZYL ALCOHOL
0372 2-METHYLBUTYL ACETATE
0585 2-METHYLBUTYL ACETATE
0155 2-METHYLBUTYL BUTYRATE
0157 2-METHYLBUTYL ISOBUTYRATE
1080 2-METHYLBUTYRIC ACID
1186 3-METHYLCYCLOPENTADIONE-1,2
0702 METHYLENE CHLORIDE
1223 2-METHYLFURAN
0704 4-METHYLPENTANONE-2
1121 2-METHYLPYRAZINE
1122 2-METHYLPYRAZINE
1195 5-METHYLPYRROLE-2-CARBOXALD.
1168 2-METHYLTHIOACETALDEHYDE
1170 2-METHYLTHIOACETALDEHYDE
1169 2-METHYLTHIOETHANOL
0028 MUSK XYLENE
0440 MUSK XYLENE
0906 MUSK XYLENE
0957 MUSK XYLENE
1096 MUSK XYLENE
1098 MUSK XYLENE
0012 MUSTARD GAS
0255 MUSTARD GAS
0179 MYRCENE
0767 MYRCENE
0630 MYRISTIC ACID
1051 MYRISTIC ACID
1031 MYRISTICIN
0662 NAPHTHALENE
0133 B&-NAPHTHOL
1090 NATURAL MUSK
0192 NAVADEL
0572 NICOTINE
0573 NICOTINE
0509 NITRIC ACID
0060 NITROBENZENE
0708 NITROBENZENE
0759 NITROBENZENE
0915 NITROBENZENE
0962 NITROBENZENE
0320 NITROCYCLOHEXANE
0510 O&-NITROPHENOL
0536 NONADECANOIC ACID
10042 T,4T-NONADIENAL
10052 T,6C-NONADIENAL
10022 T,6T-NONADIENAL
1221 1,3-NONADIENE
1220 2,4-NONADIENE
1222 2,4-NONADIENE
0279 D&-NONALACTONE
0652 D&-NONALACTONE
0652 G&-NONALACTONE
0753 G&-NONALACTONE
1030 G&-NONALACTONE
0169 NONANAL
0225 NONANAL
0735 NONANAL
0331 NONANAL OXIME
1202 NONANE
0621 NONANOIC ACID
0363 2-NONANONE
0149 2-NONENAL
0823 2-NONENAL
1007 2-NONENAL
1161 8-NONENAL
1162 8-NONENAL
1003 2T-NONENAL
1008 2T-NONENAL
1141 2T-NONENAL
1142 2T-NONENAL
1143 3C-NONENAL
1144 3C-NONENAL
1145 4C-NONENAL
1146 4C-NONENAL
1147 4T-NONENAL
1148 4T-NONENAL
1149 5C-NONENAL
1150 5C-NONENAL
1151 5T-NONENAL
1152 5T-NONENAL
1153 6C-NONENAL
1154 6C-NONENAL
1006 6T-NONENAL
1155 6T-NONENAL
1156 6T-NONENAL
1157 7C-NONENAL
1158 7C-NONENAL
1159 7T-NONENAL
1160 7T-NONENAL
1205 1-NONENE
1232 1-NONENOL-3
1233 2-NONENOL-4
1165 2T-NONENONE-4
1209 1-NONYNE
0602 NOOTKATONE
0603 NOOTKATONE

0604 NOOTKATONE
0605 NOOTKATONE
0606 NOOTKATONE
0607 NOCTKATONE
0608 NOCTKATONE
0609 NOOTKATONE
0610 NOOTKATONE
0611 NOCTKATONE
10092 T,4T-CCTADIENAL
10282 T,5C-OCTADIENAL
1217 1,3-OCTADIENE
1218 1,4-CCTADIENE
1219 2,4-OCTADIENE
0757 D&-OCTALACTONE
0601 G&-CCTALACTCNE
0752 G&-OCTALACTCNE
0168 OCTANAL
0226 OCTANAL
0332 OCTANAL
0737 OCTANAL
0138 OCTANOIC ACID
0139 OCTANOIC ACID
0619 OCTANOIC ACID
0709 OCTANOIC ACID
0989 CCTANOIC ACID
1047 OCTANOIC ACID
0364 2-OCTANONE
0379 2-OCTANONE
0380 2-OCTANONE
0381 2-OCTANONE
0386 2-OCTANONE
0690 2-OCTANONE
1029 2T-OCTENAL
1204 1-OCTENE
0387 1-OCTENOL-3
0766 1-OCTENOL-3
0812 1-OCTENOL-3
1231 1-OCTENOL-3
0187 OCTYL ACETATE
0122 OCTYL ALCOHCL
1065 OCTYL ALCOHOL
0178 OCTYL ISOBUTYRATE
1053 CLEIC ACID
1105 ONION OIL
0512 OXALIC ACID
0267 OXIDIZED OIL
0061 OXIDIZED OILS
0002 OZONE
0362 PALMITIC ACID
1050 PALMITIC ACID
0211 PARATHION
0632 PENTADECANOIC ACID
0020 1-PENTANETHIOL
0835 1-PENTANCL
0365 2-PENTANONE
0979 2T-PENTENAL
0745 1-PENTENE
1166 1-PENTENOL-3
0614 PENTHIONINE
0615 PENTHIONINE
0053 PENTYL ACETATE
0104 PENTYL ACETATE
0343 PENTYL ACETATE
0344 PENTYL ACETATE
0371 PENTYL ACETATE
0431 PENTYL ACETATE
0432 PENTYL ACETATE
1024 PENTYL ACETATE
0378 2-PENTYL ACETATE
0377 3-PENTYL ACETATE
0375 TERT-PENTYL ACETATE
1062 PENTYL BUTYRATE
0830 T-PENTYL ISOVALERATE
0831 PENTYL SULFIDE
0052 PENTYL VALERATE
0597 PENTYL VALERATE
0382 2-PENTYLFURAN
1027 2-PENTYLFURAN
1227 2-PENTYLFURAN
1139 2-PENTYLPYRAZINE
1140 2-PENTYLPYRAZINE
1207 1-PENTYNE
0009 PHENARSAZINE CHLORIDE
1179 PHENETHYL ALCOHOL
0123 PHENOL
0712 PHENOL
1086 PHENOL
0202 2-PHENCXYPROPICNIC ACID
0269 PHENYL ETHER
0691 PHENYL ETHER
0907 PHENYL ETHER
0956 PHENYL ETHER
0030 PHENYL ISONITRILE
0271 PHENYL ISONITRILE
0829 PHENYL ISONITRILE
0919 PHENYL ISONITRILE
0925 PHENYL ISCNITRILE
1076 PHENYL ISONITRILE
1077 PHENYL ISONITRILE
0029 PHENYL ISOTHICCYANATE
0250 PHENYL ISOTHIOCYANATE
0918 PHENYL ISOTHICCYANATE
0964 PHENYL ISOTHIOCYANATE
1071 PHENYL ISOTHIOCYANATE
0005 PHENYL SULFIDE
0692 PHENYL SULFIDE
0728 PHENYL SULFIDE
0909 PHENYL SULFIDE
0955 PHENYL SULFIDE
0600 1-PHENYL-3-METHYLPENTANOL-3
1174 PHENYLACETALCEHYDE
0874 PHENYLALANINE
0445 PHENYLTHIOUREA
0817 PHENYLTHIOUREA
0713 PHOSGENE
0714 PHOSPHINE
0441 PICRIC ACID
0444 PICRIC ACID
0182 PINENE-2/10
1063 PIPERONAL
0319 POLYCHLOROPINENE
0534 POLYGLYCOL ALKYL PHENYL E.
0535 POLYGLYCCL ALKYL PHENYL E.
0318 POT. IPR2-DITHIOPHOSPHATE
0300 POTASSIUM BITARTRATE
0442 POTASSIUM BITARTRATE

0513	POTASSIUM CHLORIDE
0514	POTASSIUM CHLORIDE
0532	POTASSIUM DIETHYLDITHIOPa
0201	PRO-NOX FISH
0861	PROLINE
0016	1-PROPANETHIOL
0778	1-PROPANETHIOL
0822	1-PROPANETHIOL
0916	1-PROPANETHIOL
0348	1-PROPANOL
0353	1-PROPANOL
0579	1-PROPANOL
1025	1-PROPANOL
0809	PROPENYL GUAIETHOL
0810	PROPENYL GUAIETHOL
0811	PROPENYL GUAIETHOL
1108	PROPENYL PROPYL DISULFIDE
0653	Pa-PROPENYLANISOLE
0980	Pa-PROPENYLANISOLE
0981	Pa-PROPENYLANISOLE
0165	PROPIONALDEHYDE
0231	PROPIONALDEHYDE
0292	PROPIONALDEHYDE
0329	PROPIONALDEHYDE
0923	PROPIONALDEHYDE
0928	PROPIONALDEHYDE
1182	PROPIONIC ACID
0584	PROPYL BUTYRATE
1106	PROPYL DISULFIDE
1110	PROPYL METHANE-THIOSULFATE
1111	PROPYL PROPANE-THIOSULFATE
0587	PROPYL PROPIONATE
0063	PROPYL SULFIDE
0261	PROPYL SULFIDE
0921	PROPYL SULFIDE
0952	PROPYL SULFIDE
1225	2-PROPYLFURAN
0273	PROPYNAL
0045	PYRIDINE
0124	PYRIDINE
0236	PYRIDINE
0427	PYRIDINE
0715	PYRIDINE
0917	PYRIDINE
0963	PYRIDINE
1087	PYRIDINE
0515	QUININE
0516	QUININE
0085	QUININE HCL
0477	QUININE HCL
0494	QUININE HCL
0499	QUININE HCL
0500	QUININE HCL
0501	QUININE HCL
0092	QUININE Sa
0093	QUININE Sa
0420	QUININE Sa
0478	QUININE Sa
0495	QUININE Sa
0496	QUININE Sa
0504	QUININE Sa
0517	QUININE Sa
1115	QUININE Sa
1116	QUININE Sa
1117	QUININE Sa
0125	QUINOLINE
0212	ROTENONE
0969	SABINENE
0479	SACCHARIN
0487	SACCHARIN
0814	SACCHARIN
0428	SAFROLE
0518	SAFROLE
0645	SAFROLE
0858	SERINE
0073	SKATOLE
0237	SKATOLE
1085	SKATOLE
0867	SODIUM ASPARTATE
0521	SODIUM BROMIDE
0096	SODIUM CHLORIDE
0097	SODIUM CHLORIDE
0519	SODIUM CHLORIDE
0520	SODIUM CHLORIDE
0522	SODIUM CHLORIDE
0523	SODIUM CHLORIDE
0524	SODIUM CHLORIDE
0525	SODIUM CHLORIDE
0526	SODIUM CHLORIDE
0527	SODIUM CHLORIDE
0528	SODIUM CHLORIDE
0529	SODIUM CHLORIDE
0530	SODIUM CHLORIDE
0537	SODIUM FLUORIDE
0866	SODIUM GLUTAMATE
0538	SODIUM HYDROXIDE
0539	SODIUM IODIDE
0815	SODIUM SACCHARIN
0317	SODIUM 2,4-D
0533	SODIUM 2,4-D
0361	STEARIC ACID
1052	STEARIC ACID
0540	STROPHANTHIN
0542	STRYCHNINE
0543	STRYCHNINE HCL
0544	STRYCHNINE HCL
1088	STRYCHNINE HCL
0541	STRYCHNINE Sa
0126	STYRENE
0664	STYRENE
0716	STYRENE
0717	STYRENE
0301	SUCCINIC ACID
0545	SUCCINIC ACID
0546	SUCCINIC ACID
0099	SUCROSE
0100	SUCROSE
0302	SUCROSE
0498	SUCROSE
0547	SUCROSE
0548	SUCROSE
0549	SUCROSE
0550	SUCROSE
0551	SUCROSE
0552	SUCROSE
0553	SUCROSE

0848 SUCROSE
0718 SULFUR DICHLORIDE
0719 SULFUR DIOXIDE
0303 SULFURIC ACID
0554 SULFURIC ACID
0555 SULFURIC ACID
0304 SULFUROUS ACID
0556 SULFUROUS ACID
0041 TARTARIC ACID
0086 TARTARIC ACID
0298 TARTARIC ACID
0464 TARTARIC ACID
0467 TARTARIC ACID
0468 TARTARIC ACID
0469 TARTARIC ACID
0470 TARTARIC ACID
0473 TARTARIC ACID
0474 TARTARIC ACID
0493 TARTARIC ACID
0838 TARTARIC ACID
0846 TARTARIC ACID
0849 TARTARIC ACID
0971 A&-TERPINEOL
0972 A&-TERPINEOL
0970 TERPINOLENE
0323 SYM-TETRACHLOROETHANE
0755 TETRACHLOROETHYLENE
0746 D&-TETRADECALACTONE
0659 TETRALIN
1133 2356-TETRAMETHYLPYRAZINE
1134 2356-TETRAMETHYLPYRAZINE
0026 X-THIOCRESOL
0966 X-THIOCRESOL
0860 THREONINE
1191 TIGLIC ACID
0720 TOLUENE
0721 TOLUENE
0242 P@-TOLUENETHIOL
0722 P@-TOLYL ISOCYANATE
0199 TOXAPHENE
0313 TRICHLORGON
0006 TRICHLOROACETYL CHLORIDE
0316 TRICHLOROETHYLENE
0723 TRICHLOROETHYLENE
0200 245-TRICHLOROPHENOXYACETIC ACI
0629 TRIDECANOIC ACID
0340 2-TRIDECANONE
0106 TRIMETHYLAMINE
0675 TRIMETHYLAMINE
1129 235-TRIMETHYLPYRAZINE
1130 235-TRIMETHYLPYRAZINE
0875 TRYPTOPHANE
0599 D&-UNDECALACTONE
0758 G&-UNDECALACTONE
0171 UNDECANAL
0818 UNDECANAL
0968 UNDECANAL
0973 UNDECANAL
0626 UNDECANOIC ACID
0145 2-UNDECANONE
0341 2-UNDECANONE
0967 2T-UNDECENAL
0437 UREA
0163 VALERALDEHYDE
0229 VALERALDEHYDE
0335 VALERALDEHYDE
0422 VALERALDEHYDE
0733 VALERALDEHYDE
0747 VALERALDEHYDE
0978 VALERALDEHYDE
1010 VALERALDEHYDE
0568 VALERIC ACID
0834 VALERIC ACID
0871 VALINE
0797 VANILLA EXTRACT
0798 VANILLA EXTRACT
0799 VANILLA EXTRACT
0076 VANILLIN
0249 VANILLIN
0438 VANILLIN
0598 VANILLIN
0800 VANILLIN
0801 VANILLIN
0802 VANILLIN
1082 VANILLIN
1103 VINYL AMYL KETONE
1104 VINYL AMYL KETONE
1238 VINYL AMYL KETONE
1237 VINYL BUTYL KETONE
1235 VINYL ETHYL KETONE
1236 VINYL PROPYL KETONE
1228 2-VINYLFURAN
0461 WOOD TAR
0439 M@-XYLENE
0764 P@-XYLENE
0107 XYLENE -/MIXED/
1081 XYLENE -/MIXED/
0183 2-PINENE
1201 2,3-H2-3,5-HO2-6-ME-PYRANONE-4
0391 3,T-BUTYL T-N-T
0392 3,T-BUTYL T-N-T
0393 3,T-BUTYL T-N-T
0394 3,T-BUTYL T-N-T
0425 3,T-BUTYL T-N-T

TABLE 2
Data-Bibliography Listing

This Table contains the code (acquisition) number, and codes for modality, type, media, purity, threshold values, and the units expressed. It also contains the molecular weight, Wiswesser Line Notation (WLN), as well as the journal, periodical, book, monograph, or special paper reference.

The coding key that appears at the bottom of each data page is self-explanatory. A word of further explanation on the use of the format for the threshold value should be given. For example, the threshold notation for Code item 4, glycerol, is 3.80E − 05/10, where 3.80E − 05 means 3.8×10^{-5} and the /10 indicates the unit, which in this case means g/100 ml water. Thus, the reported threshold value for that particular substance is 3.8×10^{-5} g/100 ml water. The value for Code item 990, hexanoic acid, is 1.40E + 01/01, where 1.40E + 01 means 1.4×10^{1} and /01 means ppm. Therefore, the threshold value for hexanoic acid is 14 ppm.

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1	ETHYL SELENOMERCAPTAN 2-SE-H C 2 H 6 SE	1	2	01	1	1.80E-06/04	109.0	MONO	31	BMAG	
2	OZONE OOO O3	1	2	01	1	1.00E-03/04	048.0	MONO	31	BMAG	
3	CYANODIPHENYLARSINE NC-AS-R&R C13 H10 AS N	9	2	01	9	1.00E-03/04	253.0	BOOKA	37		209
4	GLYCEROL Q1YQ1Q C 3 H 8 O3	1	1	02	1	3.80E-05/10	092.1	FCTEA	55	9	23
5	PHENYL SULFIDE RSR C12 H10 S	1	2	01	9	3.40E-04/01	186.2	PAPER	30	BMTP	
6	TRICHLOROACETYL CHLORIDE GXGGVG C 2 CL4 O	1	2	01	1	8.80E-03/04	197.9	MONO	31	BMAG	
7	1,2-ETHANEDITHIOL SH2SH C 2 H 6 S2	1	2	01	1	1.60E-03/04	094.2	MONO	31	BMAG	
8	CHLORODIPHENYLARSINE G-AS-R&R C 6 H 5 AS CL	9	2	01	9	3.00E-04/04	264.6	BOOKA	37		

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
9	PHENARSAZINE CHLORIDE T C666 B-AS- IMJ BG C12 H10 AS CL2 N										
		9	2	01	9	2.50E-03/04	277.6	BOOKA	37		
10	DIMETHYL TRITHIOCARBONATE SUYS1&S1 C 3 H 6 S3										
		1	2	01	9	1.80E-04/04	074.0	MONO	31	BMAG	
11	ETHYLENE DICHLORIDE G2G C 2 H 4 CL2										
		1	2	01	1	4.30E-03/04	099.0	MONO	31	BMAG	
12	MUSTARD GAS G2S2G C 4 H 8 CL2 S										
		1	2	01	1	1.30E-03/04	159.1	MONO	31	BMAG	
13	CROTYL MERCAPTAN SH2U2 C 4 H 8 S										
		1	2	01	1	2.90E-05/04	092.0	MONO	31	BMAG	
14	8&-CHLOROVINYLDICHLOROARSINE G1U1-AS-GG C 2 H 2 AS CL3										
		9	2	01	9	1.40E-02/04	204.0	BOOKA	37		
15	W&-CHLOROACETOPHENONE G1VR C 8 H 7 CL O										
		1	2	01	1	8.50E-03/04	154.6	MONO	31	BMAG	
16	1-PROPANETHIOL SH3 C 3 H 8 S										
		1	2	01	1	7.50E-05/04	076.2	MONO	31	BMAG	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
17	DICHLOROETHYLARSINE G-AS-G2 C 2 H 5 AS CL2										
		9	2	01	9	1.00E-03/04	172.0	BOOKA	37		
18	*AKROL* -MIXED TERPENES C										
		1	2	01	2	1.00E-02/04	.	MONO	31	BMAG	
19	ALLYL ISOCYANIDE CN2U1 C 4 H 5 N										
		1	2	01	9	4.30E-03/04	067.1	MONO	31	BMAG	
20	1-PENTANETHIOL SH5 C 5 H12 S										
		1	2	01	1	3.00E-04/04	104.2	MONO	31	BMAG	
21	ISOPENTYL SULFIDE 1Y&2S2Y C10 H22 S										
		1	2	01	1	3.00E-04/04	174.3	MONO	31	BMAG	
22	ACETYL BROMIDE EV1 C 2 H 3 BR O										
		1	2	01	1	5.00E-04/04	137.0	MONO	31	BMAG	
23	ETHYL ACETATE 2OV1 C 4 H 8 O2										
		1	1	02	1	8.00E-08/01	088.1	FOTEA	55	9	23
24	METHYL SULFIDE 1S1 C 2 H 6 S										
		1	2	02	1	2.00E+01/06	062.1	PAPER	57	ACS	

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
25	METHYL SULFIDE 1S1 C 2 H 6 S	1	1	02	1	1.20E+01/06	062.1	FOREA	57	22	316
26	X-THIOCRESOL SHR X C 7 H 8 S	1	2	01	1	1.00E-04/04	124.2	MONO	31	BMAG	
27	BENZENETHIOL SHR C 6 H 6 S	1	2	01	1	6.20E-05/04	110.2	MONO	31	BMAG	
28	MUSK XYLENE WNR B 0 CNW ENW FX C12 H15 N3 06	1	2	01	1	1.00E-05/04	297.3	MONO	31	BMAG	
29	PHENYL ISOTHIOCYANATE SCNR C 7 H 5 N S	1	2	01	1	2.40E-03/04	135.2	MONO	31	BMAG	
30	PHENYL ISONITRILE CNR C 7 H 5 N	1	2	01	1	2.90E-05/04	103.1	MONO	31	BMAG	
31	DICHLOROMETHYLARSINE G-AS-G1 C H 3 AS CL2	9	2	01	9	8.00E-04/04	160.9	BOOKA	37	1	
32	BUTYL SULFIDE 4S4 C 8 H18 S	1	2	01	1	1.10E-03/04	146.3	MONO	31	BMAG	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
33	1-BUTANETHIOL SH4 C 4 H10 S	1	2	01	3	1.80E-02/04	90.1	IECHA	19	11	336
34	DIETHYL SELENIDE 2-SE-2 C 4 H10 SE	1	2	01	1	6.20E-05/04	137.1	MONO	31	BMAG	
35	D&-DECALACTONE T6OVTJ F5 C10 H18 02	1	1	03	1	1.00E-00/01	172.0	BOOKO	58	1	320
36	ACROLEIN VH1U1 C 3 H 4 O	1	2	02	1	1.10E-05/01	056.1	JSFAA	63	14	761
37	FRUCTOSE T5OTJ BQ B1Q CQ DQ E1Q C 6 H12 06	1	1	02	1	1.50E-05/01	180.2	FOTEA	55	9	23
38	ALLYLAMINE Z2U1 C 3 H 7 N	1	2	01	1	6.70E-02/04	057.1	MONO	31	BMAG	
39	ALLYL ALCOHOL Q2U1 C 3 H 6 O	1	2	01	1	1.70E-02/04	058.1	MONO	31	BMAG	
40	AMYLENE 2UY C 5 H10	1	2	01	1	6.60E-03/04	070.1	MONO	31	BMAG	

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
41	TARTARIC ACID QVYQYQVQ C 4 H 6 06										
		1	1	99	1	2.50E-07/01	150.1	FOTEA	55	9	23
42	BENZYL CHLORIDE G1R C 7 H 7 CL										
		1	2	01	9	4.00E-02/01	126.6	PAPER	30	BMTP	
43	X-CHLOROPHENOL QR XG C 6 H 5 6										
		1	2	01	1	1.80E-04/04	128.6	MONO	31	BMAG	
44	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		1	1	99	1	2.50E-07/01	210.1	FOTEA	55	9	23
45	PYRIDINE T6NJ C 5 H 5 N										
		1	2	01	3	3.20E-02/04	079.1	IECHA	19		336
46	BUTYRALDEHYDE VH3 C 4 H 8 O										
		1	2	01	1	2.20E-03/04	054.1	MONO	31	BMAG	
47	METHYL SULFIDE 1S1 C 2 H 6 S										
		1	2	01	2	1.10E-03/04	062.1	MONO	31	BMAG	
48	METHANETHIOL SH1 C H 4 S										
		1	2	02	9	2.00E-03/01	048.1	FOTEC	66	54	1549

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
49	METHYL ANTHRANILATE ZR BVO1 C 8 H 9 N O2										
		1	2	01	1	3.7CE-04/04	151.2	MONO	31	BMAG	
50	BENZYL MERCAPTAN SH1R C 7 H 8 S										
		1	2	01	1	1.90E-04/04	124.2	MONO	31	BMAG	
51	BENZALDEHYDE VHR C 7 H 6 O										
		1	2	01	1	3.00E-03/04	106.1	MONO	31	BMAG	
52	PENTYL VALERATE 5OV4 C10 H20 O2										
		1	2	01	1	8.00E-04/04	172.3	MONO	31	BMAG	
53	PENTYL ACETATE 5OV1 C 7 H14 O2										
		1	2	01	1	.6.00E-04/04	130.2	MONO	31	BMAG	
54	ALLYL SULFIDE 1U2S2U1 C 6 H10 S										
		1	2	01	1	5.00E-05/04	114.2	MONO	31	BMAG	
55	ALLYL MERCAPTAN SH2U1 C 3 H 6 S										
		1	2	01	1	5.00E-05/04	074.1	MONO	31	BMAG	
56	ALLYL ISOTHIOCYANATE SCN2U1 C 4 H 5 N S										
		1	2	01	1	1.70E-03/04	099.2	MONO	31	BMAG	

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
57	ALLYL OISULFIOE 1U2SS2U1 C 6 H10 S2										
		1	2	01	9	1.20E-03/01	146.3	PAPER	30	BMTP	
58	ACETALDEHYDE VH1 C 2 H 4 O										
		1	1	02	3	1.30E-04/10	044.1	FOTEA	55	9	23
59	HEXANAL VH5 C 6 H12 O										
		1	2	02	3	3.00E-02/01	100.2	FOTEA	66	20	1549
60	NITROBENZENE WNR C 6 H 5 N O2										
		1	2	01	3	1.46E-02/04	123.1	IECHA	19		336
61	OXIDIZED OILS C										
		1	2	02	2	1.10E-03/04	061.0	MONO	31	BMAG	
62	METHYL ETHYL KETONE 2V1 C 4 H 8 O										
		1	2	02	3	5.00E+01/01	072.1	FOTEA	66	20	1549
63	PROPYL SULFIDE 3S3 C 6 H14 S										
		1	2	01	1	8.10E-04/04	118.2	MONO	31	BMAG	
64	CHLOROPICRIN WNXGGG C CL3 N O										
		1	2	01	1	7.30E-03/04	164.4	MONO	31	BMAG	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
65	COUMARIN T66 BOVJ C 9 H 6 02										
		1	2	01	1	3.40E-04/04	146.1	MONO	31	BMAG	
66	CROTONALDEHYDE VH1U2 C 4 H 6 O										
		1	2	01	1	2.10E-02/04	070.1	MONO	31	BMAG	
67	CYANOGEN CHLORIDE NCG C CL N										
		1	2	01	1	2.50E-03/04	061.5	MONO	31	BMAG	
68	ETHYLENE DICHLORIDE G2G C 2 H 4 CL2										
		1	2	01	1	2.50E-02/04	099.0	MONO		BMAG	
69	ETHYL THIOCYANATE NCS2 C 3 H 5 N S										
		1	2	01	1	3.80E-02/04	087.1	MONO	31	BMAG	
70	ETHANETHIOL SH2 C 2 H 6 S										
		1	2	01	3	6.60E-07/04	062.1	BOOKE	65	1	186
71	ETHYL SULFIOE 2S2 C 4 H10 S										
		1	2	01	1	2.50E-04/04	090.1	MONO	31	BMAG	
72	METHYL THIOCYANATE NCS1 C 2 H 3 N S										
		1	2	01	1	9.60E-03/04	073.1	MONO	31	BMAG	

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CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
73	SKATOLE T56 BMJ D C 9 H 9 N										
		1	2	01	1	1.20E-03/04	131.2	MOND	31	BMAG	
74	HYDROGEN CYANIDE NCH C H N										
		1	2	01	9	1.00E-03/04	027.0	MOND	31	BMAG	
75	HYDROGEN SULFIDE SHH H2 S 1777										
		1	2	01	9	1.30E-01/01	034.1	PAPER	30	BMTP	
76	VANILLIN VHR OQ C01 C 8 H 8 03										
		2	1	02	3	5.00E-01/01	152.1	PERCO	68	LAND	
77	ISOVALERALDEHYDE VH1Y C 5 H10 O										
		2	1	02	3	2.00E-01/01	086.1	PERCO	68	LAND	
78	HEXANAL VH5 C 6 H12 O										
		2	1	02	3	2.00E-01/01	100.2	PERCO	68	LAND	
79	HEXANAL VH5 C 6 H12 O										
		2	2	02	3	4.00E-01/01	100.2	PERCO	68	LAND	
80	METHIONAL VHYZ2S1 C 5 H11 N O S										
		1	2	99	3	5.00E-02/01	104.0	PERCO	68	LAND	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
81	DIACETYL 1VV1 C 4 H 6 02	1	2	02	3	2.30E-00/01	089.1	PERCO	68	LAND	
82	DIACETYL 1VV1 C 4 H 6 02	1	1	02	3	2.50E-00/01	089.1	PERCO	68	LAND	
83	2-HEPTANONE 5V1 C 7 H14 O	2	1	02	3	1.00E-00/01	114.2	PERCO	68	LAND	
84	2-HEPTANONE 5V1 C 7 H14 O	2	2	02	3	3.00E-00/01	114.2	PERCO	68	LAND	
85	QUININE HCL T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U* C20 H29 CL N2 02	3	1	02	3	2.00E-08/01	360.9	PERCO	68	LAND	
86	TARTARIC ACID QVYQYQVQ C 4 H 6 06	3	1	02	3	1.80E-06/01	168.1	PERCO	68	LAND	
87	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07	3	1	02	3	3.00E-06/01	192.1	PERCO	68	LAND	
88	DIMETHYL DISULFIDE 1SS1 C 2 H 6 S2	2	1	02	3	1.50E-01/01	062.1	PERCO	68	LAND	

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
89	DIMETHYL DISULFIDE 1SS1 C 2 H 6 S2	2	2	02	3	9.00E-02/01	062.1	PERCO	68	LAND	
90	IONONE, B&- L6UTJ A 81U1V1 C C C13 H20 O	1	2	99	3	7.30E+01/01	192.3	PERCO	68	LAND	
91	ISOVALERALDEHYDE VH1Y C 5 H10 O	2	2	02	3	1.30E+01/01	086.1	PERCO	68	LAND	
92	QUININE S@ T66 8NJ HO1 EYQ- DT66 A 8 CNTJ A1U1* C40 H50 N4 O8 S	2	1	02	3	6.00E+00/01	746.9	PERCO	68	LAND	
93	QUININE S@ T66 BNJ HO1 EYQ- DT66 A 8 CNTJ A1U1* C40 H50 N4 O8 S	2	1	02	3	1.10E+01/01	746.9	PERCO	68	LAND	
94	CITRIC ACID QV1XQVQ1VQ C 6 H 8 O7	2	1	02	3	5.9CE+02/01	192.1	PERCO	68	LAND	
95	CAFFEINE T56 BN DN FNVNVJ B F H C 8 H10 N4 O2	3	1	02	3	4.00E-07/01	194.2	PERCO	68	LAND	
96	SODIUM CHLORIDE .NA..G CL NA	2	1	02	3	1.30E+C3/01	058.5	PERCO	68	LAND	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
97	SODIUM CHLORIDE .NA..G CL NA										
		3	1	02	3	2.50E-05/01	058.5	PERCO	68	LAND	
98	METHIONAL VHYZ2S1 C 5 H11 N O S										
		1	1	99	3	4.00E-02/01	104.0	PERCO	68	LAND	
99	SUCROSE T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D* C12 H22 O11										
		3	1	02	3	8.00E-05/01	342.3	PERCO	68	LAND	
100	SUCROSE T6OTJ B1Q CQ DQ EQ FO- 8T5OTJ B1Q CQ D* C12 H22 O11										
		2	1	02	3	6.80E-03/01	342.3	PERCO	68	LAND	
101	ETHYL ACRYLATE 2OV1U1 C 5 H 8 O2										
		1	2	02	1	6.70E-02/01	100.1	JAWWA	63	55	913
102	2,4-DICHLOROPHENOL QR BG DG C 6 H 4 CL2 O										
		1	2	02	1	2.10E-01/01	163.0	JAWWA	63	55	913
103	2,2*-DICHLOROISOPROPYL ETHER G1Y&OY1G C 6 H12 CL2 O										
		1	2	02	1	3.20E-01/01	171.0	JAWWA	63	55	913
104	PENTYL ACETATE 5OV1 C 7 H14 02										
		1	2	02	1	8.00E-02/01	088.1	JAWWA	63	55	913

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Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
105	BENZENETHIOL SHR C 6 H 6 S	1	2	02	1	1.35E+01/01	110.1	JAWWA	63	55	913
106	TRIMETHYLAMINE 1N1&1 C 3 H 9 N	1	2	02	1	1.7CE+00/01	059.1	JAWWA	63	55	913
107	XYLENE -/MIXED/ 1R X C 8 H10	1	2	02	1	2.21E+00/01	297.2	JAWWA	63	55	913
108	2-METHYL-5-VINYLPYRIDINE T6NJ B E1U1 C 8 H 9 N	1	2	02	1	4.00E-02/01	123.0	JAWWA	63	55	913
109	2-METHYL-5-ETHYLPYRIDINE T6NJ 8 E2 C 8 H11 N	1	2	02	1	5.00E-02/01	121.1	JAWWA	63	55	913
110	2-MERCAPTOETHANOL SH2Q C 2 H 6 O S	1	2	02	1	6.40E-01/01	048.1	JAWWA	63	55	913
111	BENZENE R C 6 H 6	1	2	02	1	3.13E+01/01	078.1	JAWWA	63	55	913
112	ACETONE 1V1 C 3 H 6 O	1	2	02	1	4.09E+01/01	058.0	JAWWA	63	55	913

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
113	ACRYLONITRILE NC1U1 C 3 H 3 N	1	2	02	1	1.86E+C1/01	053.0	JAWWA	63	55	913
114	3-CHLOROPROPENE G2U1 C 3 H 5 CL	1	2	02	1	1.47E+04/01	076.5	JAWWA	63	55	913
115	ANILINE ZR C 6 H 7 N	1	2	02	1	7.01E+01/01	093.1	JAWWA	63	55	913
116	1-BUTANETHIOL SH4 C 4 H10 S	1	2	02	1	6.00E-03/01	090.1	JAWWA	63	55	913
117	MALIC ACID QVYQ1VQ C 4 H 6 05	1	2	99	1	3.00E-07/01	134.0	FOTEC	55	9	23
118	P@-CHLOROPHENOL QR DG C 6 H 5 CL O	1	2	02	1	1.24E+00/01	128.5	JAWWA	63	55	913
119	ACETIC ACID QV1 C 2 H 4 02	1	2	02	1	2.43E+01/01	060.0	JAWWA	63	55	913
120	W&-BROMOACETOPHENONE E1VR C 8 H 7 BR O	1	2	02	1	1.70E-01/01	120.1	JAWWA	63	55	913

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
121	1-BUTANOL Q4 C 4 H10 O										
		1	2	02	1	2.5CE+00/01	074.1	JAWWA	63	55	913
122	OCTYL ALCOHOL Q8 C 8 H18 O										
		1	2	02	1	1.30E-01/01	130.2	JAWWA	63	55	913
123	PHENOL QR C 6 H 6 O										
		1	2	02	1	5.90E+00/01	094.1	JAWWA	63	55	913
124	PYRIDINE T6NJ C 5 H 5 N										
		1	2	02	1	8.20E+01/01	079.1	JAWWA	63	55	913
125	QUINOLINE T66 BNJ C 9 H 7 N										
		1	2	02	1	7.10E+01/01	129.1	JAWWA	63	55	913
126	STYRENE 1U1R C 8 H 8										
		1	2	02	1	7.30E-01/01	104.1	JAWWA	63	55	913
127	M@-CRESOL QR C C 7 H 8 O										
		1	2	02	1	6.80E-01/01	108.1	JAWWA	63	55	913
128	O@-CRESOL QR B C 7 H 8 O										
		1	2	02	1	6.50E-01/01	108.1	JAWWA	63	55	913

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
129	DIMETHYLAMINE 1M1 C 2 H 7 N	1	2	02	1	2.32E+01/01	045.0	JAWWA	63	55	913
130	FORMALDEHYDE VHH C H 2 O	1	2	02	1	4.99E-01/01	030.0	JAWWA	63	55	913
131	MESITYLENE 1R C E C 9 H12	1	2	02	1	2.70E-02/01	120.1	JAWWA	63	55	913
132	METHYLAMINE Z1 C H 5 N	1	2	02	1	3.33E+00/01	031.0	JAWWA	63	55	913
133	8&-NAPHTHOL L66J CQ C10 H 8 O	1	2	02	1	1.29E+00/01	144.1	JAWWA	63	55	913
134	LACTIC ACID QYVQ C 3 H 6 03	1	2	99	1	4.00E-07/01	090.0	FOTEA	55	9	23
135	DECANOIC ACID QV9 C10 H20 02	1	1	02	1	3.50E+00/01	172.2	JFDSA	64	29	679
136	LAURIC ACID QV11 C12 H24 D2	1	1	05	3	7.00E+02/01	200.3	JFDSA	64	29	679

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
137	DECANOIC ACID QV9 C10 H20 O2										
		1	1	05	3	2.00E+02/01	172.2	JFDSA	64	29	679
138	OCTANOIC ACID QV7 C 8 H16 O2										
		1	1	02	1	5.80E+00/01	144.2	JFDSA	64	29	679
139	OCTANOIC ACID QV7 C 8 H16 O2										
		1	1	05	3	3.50E+02/01	144.2	JFDSA	64	29	679
140	HEXANOIC ACID QV5 C 6 H12 O2										
		1	1	05	3	2.50E+00/01	116.1	JFDSA	64	29	679
141	HEXANOIC ACID QV5 C 6 H12 O2										
		1	1	02	1	5.40E+00/01	116.1	JFDSA	64	29	679
142	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	2	01	3	9.00E-03/04	088.1	IECHA	19	11	336
143	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	1	05	3	6.00E-01/01	088.1	JFDSA	64	29	679
144	ACETIC ACID QV1 C 2 H 4 O2										
		1	1	02	3	8.00E-04/09	060.0	FOREA	43	08	179

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
145	2-UNDECANONE 9V1 C11 H22 O										
		1	1	02	1	5.40E+01/01	060.0	JFDSA	64	29	679
146	ACETIC ACID QV1 C 2 H 4 02										
		1	2	02	1	7.00E+00/06	170.2	JSFAA	66	17	143
147	CROTONALDEHYDE VH1U2 C 4 H 6 O										
		1	2	02	1	5.25E+02/06	070.0	JSFAA	63	14	761
148	1-BUTENE 3U1 C 4 H 8										
		1	2	01	3	9.20E-01/01	056.1	PAPER	30	8MTP	480
149	2-NONENAL VH1U7 C 9 H16 O6										
		1	2	02	1	8.00E-02/06	140.2	JSFAA	63	14	761
150	METHYL THIOHEPTANOATE 6VS1 C 8 H16 O S										
		1	2	02	1	2.00E+00/06	160.0	JSFAA	66	17	143
151	METHYL THIOHEXANOATE 5VS1 C 7 H14 O S										
		1	2	02	1	3.00E-01/06	146.0	JFSAA	66	17	143
152	ISOBUTYL ISOBUTYRATE 1Y&VO1Y C 8 H16 02										
		1	2	02	1	3.00E+01/06	144.2	JFSAA	66	17	143

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CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
153	METHYL 4,8-DECADIENOATE 2U4U3VO1 C11 H18 O2										
		1	2	02	1	1.00E+01/06	182.0	JFSAA	66	17	143
154	METHYL 4-DECENOATE 6U3VO1 C11 H20 O2										
		1	2	02	1	3.00E+00/06	184.0	JFSAA	66	17	143
155	2-METHYLBUTYL BUTYRATE 3VO1Y2 C 9 H18 O2										
		1	2	02	1	2.80E+01/06	144.0	JFSAA	66	17	143
156	2-METHYL 2-METHYLBUTYRATE 2Y&1VO1Y2 C10 H20 O2										
		1	2	02	1	2.40E+01/06	172.0	JFSAA	66	17	143
157	2-METHYLBUTYL ISOBUTYRATE 2Y&1OVY C 9 H18 O2										
		1	2	02	1	1.40E+01/06	158.0	JFSAA	66	17	143
158	1-BUTANETHIOL SH4 C 4 H10 S										
		1	2	01	9	1.00E-03/01	090.1	PAPER	30	BMTP	480
159	HEXYL ISOBUTYRATE 6OVY C10 H20 O6										
		1	2	02	1	6.00E+00/06	172.0	JFSAA	66	17	143
160	HEPTYL PROPIONATE 7OV2 C10 H20 O2										
		1	2	02	1	4.00E+00/06	172.2	JFSAA	66	17	143

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
161	2-HEPTENAL VH1U5 C 7 H12 O6										
		1	2	02	1	1.30E+01/06	112.1	JFSAA	63	14	761
162	CARYOPHYLLENE L49 EY HUTJ B B EU1 I C15 H24										
		1	2	02	3	6.40E+01/06	204.0	JFSAA	66	17	143
163	VALERALDEHYDE VH4 C 5 H10 O										
		1	2	02	1	1.20E+01/06	086.1	JFSAA	63	14	761
164	BUTYRALDEHYDE VH3 C 4 H 8 O										
		1	2	02	1	9.00E+00/06	072.1	JFSAA	63	14	761
165	PROPIONALDEHYDE VH2 C 3 H 6 O										
		1	2	02	1	9.50E+00/06	058.0	JFSAA	63	14	761
166	HEXANAL VH5 C 6 H12 O										
		1	2	02	1	4.50E+00/06	100.1	JFSAA	63	14	761
167	1-HEPTANOL Q7 C 7 H16 O										
		1	2	02	1	3.00E+00/06	114.1	JFSAA	63	14	761
168	OCTANAL VH7 C 8 H16 O										
		1	2	02	1	7.00E-01/06	128.2	JFSAA	63	14	761

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
169	NONANAL VH8 C 9 H18 O	1	2	02	1	1.00E+00/06	142.2	JFSAA	63	14	761
170	DECANAL VH9 C10 H20 O	1	2	02	1	1.00E-01/06	156.2	JFSAA	63	14	761
171	UNDECANAL VH10 C11 H22 O	1	2	02	1	5.00E+00/06	170.2	JFSAA	63	14	761
172	LAURALDEHYDE VH11 C12 H24 O	1	2	02	1	2.00E+00/06	184.3	JFSAA	63	14	761
173	2-HEXENAL VH1U4 C 6 H10 O	1	2	02	1	1.70E+01/06	098.1	JFSAA	63	14	761
174	ISOVALERALDEHYDE VH1Y C 5 H10 O	1	2	02	1	1.50E-01/06	086.1	JFSAA	63	14	761
175	ISOBUTYRALDEHYDE VHY C 4 H 8 O	1	2	02	1	9.00E-01/06	072.1	JFSAA	63	14	761
176	DIMETHYL DISULFIDE 1SS1 C 2 H 6 S2	1	2	02	1	3.30E-01/06	062.1	JFSAA	63	14	761

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
177	METHANETHIOL SH1 C H 4 S										
		1	2	02	1	2.00E-02/06	048.1	JFSAA	63	14	761
178	OCTYL ISOBUTYRATE 8OVY C12 H24 O2										
		1	2	02	3	6.00E+00/06	200.0	JFSAA	66	17	143
179	MYRCENE 1Y&U3Y1U1 C10 H18										
		1	2	02	3	1.30E+01/06	136.0	JFSAA	66	17	143
180	ISOPENTYL MERCAPTAN SH2Y C 5 H12 S										
		1	2	01	3	4.30E-04/01	104.2	PAPER	30	BMTP	480
181	HEXYL PROPIONATE 6OV2 C 9 H18 O2										
		1	2	02	3	8.00E+00/06	158.2	JFSAA	66	17	143
182	PINENE-2/10 L46 A EYTJ A A EU1 C10 H16										
		1	2	02	3	1.40E+02/06	136.0	JFSAA	66	17	143
183	2-PINENE L46 A EUTJ A A E C10 H16										
		1	2	02	3	6.00E+00/06	136.0	JFSAA	66	17	143
184	GERANYL ISOBUTYRATE 1Y&VO2UY&3UY -T C15 H26 O2										
		1	2	02	3	1.30E+01/06	238.0	JFSAA	66	17	143

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
185	GERANYL PROPIONATE 2VO2UY&3UY -T C13 H22 O2	1	2	02	3	1.00E+01/06	210.0	JFSAA	66	17	143
186	GERANYL ACETATE 1Y&U3YU2OV1 -T C12 H20 O2	1	2	02	3	9.00E+00/06	196.2	JFSAA	66	17	143
187	OCTYL ACETATE 8OV1 C10 H20 O2	1	2	02	3	1.20E+01/06	172.2	JFSAA	66	17	143
188	HEPTYL ISOBUTYRATE 7OVY C11 H22 O2	1	2	02	3	1.30E+01/06	200.0	JFSAA	66	17	143
189	METHYL HEPTANOATE 6VO1 C 8 H16 O2	1	2	02	3	4.00E+00/06	144.2	JFSAA	66	17	143
190	DICHLOROACETIC ACID QVXGG C 3 H 4 CL2 O2	1	2	02	3	2.32E-01/01	142.9	JAWWA	65	57	1018
191	D D T GXGGR DG&R DG C14 H 9 CL5	1	2	02	3	3.50E-01/01	354.4	JAWWA	65	57	1016
192	NAVADEL T6O DOTJ B- C-/SPS&O2&O2 2 C12 H26 O6 P2 S4	1	2	02	3	6.00E-02/01	455.8	JAWWA	65	57	1016

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
193	COUMAPHOS T66 8OVJ DG E IOPS& O2&O2 C14 H16 CL 05 P S										
		1	2	02	3	2.00E-02/01	362.3	JAWWA	65	57	1016
194	8ENZENE HEXACHLORIDE L6TJ-/G 6 C 6 H 6 CL6										
		1	2	02	3	1.30E-04/01	288.0	JAWWA	65	57	1016
195	G&-8ENZENE HEXACHLORIDE L6TJ-/G 6 C 6 H 6 CL6										
		1	2	02	3	1.20E+01/01	288.0	JAWWA	65	57	1018
196	8ENZENE HEXACHLORIDE L6TJ-/G 6 C 6 H 6 CL6										
		1	2	02	3	1.25E-03/01	288.0	JAWWA	65	57	1016
197	8&-8ENZENE HEXACHLORIDE L6TJ-/G 6 C 6 H 6 CL6										
		1	2	02	3	3.20E-04/01	288.0	JAWWA	65	57	1016
198	A&-8ENZENE HEXACHLORIDE L6TJ-/G 6 C 6 H 6 CL6										
		1	2	02	3	8.80E-02/01	288.0	JAWWA	65	57	1016
199	TOXAPHENE L55 ATJ-/G # && C10 H15 CL										
		1	2	02	3	1.40E-01/01	170.0	JAWWA	65	57	1016
200	245-TRICHLOROPHENOXYACETIC ACI QV1OR BG DG EG C 8 H 5 CL3 03										
		1	2	02	3	2.92E+00/01	255.4	JAWWA	65	57	1018

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
201	PRO-NOX FISH -										
		1	2	02	9	4.00E-03/01	201.0	JAWWA	65	57	1016
202	2-PHENOXYPROPIONIC ACID QVYOR C 9 H10 O3										
		1	2	02	9	7.80E-01/01	202.0	JAWWA	65	57	1016
203	METHYL PARATHION WNR DOPS&O1&O1 C 8 H10 N O5 P S										
		1	2	02	9	1.23E-02/01	253.3	JAWWA	65	57	1016
204	MALAGRAN C10 H19 O6 P S2										
		1	2	02	9	8.10E-02/01	330.6	JAWWA	65	57	1016
205	ISOPROPYL 2,4-CL2-PHO-AC@ GR CG DO1VOY C11 H12 CL2 O3										
		1	2	02	9	5.50E-02/01	262.0	JAWWA	65	57	1016
206	ISOPROPYL 2,4-CL2-PHO-AC@ GR CG DO1VOY C11 H12 CL2 O3										
		1	2	02	9	3.10E-03/01	262.0	JAWWA	65	57	1016
207	ISOOCTYL 2,4-D GR CG DO1VO1X&&1Y C15 H22 CL2 O3										
		1	2	02	9	1.20E-01/01	319.0	JAWWA	65	57	1016
208	ALDRIN L D5 C555 A D- EU JUTJ AG AG BG IG JG KG C12 H 8 CL6										
		1	2	02	9	1.70E-02/01	364.9	JAWWA	65	57	1016

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
209	CHLORDANE L C555 A IUTJ AG AG BG DG EG HG IG JG C10 H 6 CL8	1	2	02	9	5.00E-04/01	400.0	JAWWA	65	57	1016
210	CHLORDANE L C555 A IUTJ AG AG BG DG EG HG IG JG C10 H 6 CL8	1	2	02	9	2.50E-03/01	400.0	JAWWA	65	57	1016
211	PARATHION WNR DOPS&O2&O2 C10 H14 N O5 P S	1	2	02	9	4.00E-02/01	291.0	JAWWA	65	57	1016
212	ROTENONE T G5 D6 B666 CV HO MC POT&TT&J IYU1 S* C23 H22 O6	1	2	02	9	3.60E-01/01	394.4	JAWWA	65	57	1016
213	METHOXYCHLOR 1OR DYXGGGR DO1 C18 H15 CL3	1	2	02	9	4.7CE+00/01	345.7	JAWWA	65	57	1016
214	CHLORDANE L C555 A IUTJ AG AG BG DG EG HG IG JG C10 H 6 CL8	1	2	02	9	2.50E-03/01	400.0	JAWWA	65	57	1016
215	2,4-DICHLOROPHENOXYACETIC ACID QV1OR BG DG C 7 H 6 CL2 O3	1	2	02	9	3.13E+00/01	221.0	JAWWA	65	57	1016
216	ENDRIN T E3 D5 C555 A D- FO KUTJ AG AG BG JG K* C12 H 8 CL6 O	1	2	02	9	4.10E-02/01	380.9	JAWWA	65	57	1016

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
217	ENDRIN T E3 D5 C555 A D- FO KUTJ AG AG BG JG K* C12 H 8 CL6 O	1	2	02	9	1.80E-02/01	378.0	JAWWA	65	57	1016
218	EPN-300 WNR DOPS&R&02 C14 H14 N 04 P S	1	2	02	9	1.80E-02/01	323.0	JAWWA	65	57	1016
219	GUTHION T66 BNNNVJ C1SPS&01&01 C10 H12 N3 03 P S2	1	2	02	9	2.00E-04/01	317.0	JAWWA	65	57	1016
220	MALATHION 2OV1YVO2&SPS&01&01 C10 H19 06 P S2	1	2	02	9	1.00E+00/01	330.3	JAWWA	65	57	1016
221	HEPTACHLOR L C555 A EU IUTJ AG AG BG DG HG IG * C10 H 5 CL7	1	2	02	9	2.00E-02/01	373.4	JAWWA	65	57	1016
222	DIMETHYL DISULFIDE 1SS1 C 2 H 6 S2	2	2	02	4	2.00E-02/06	086.1	JSFAA	63	14	761
223	METHIONAL VHYZ2S1 C 5 H11 N O S	1	1	04	1	5.00E+01/06	104.0	FOREA	57	22	316
224	DECANAL VH9 C10 H20 O	2	2	02	4	1.00E-01/06	156.3	JSFAA	63	14	761

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
225	NONANAL VH8 C 9 H18 O	2	2	02	4	1.00E+00/06	142.2	JSFAA	63	14	761
226	OCTANAL VH7 C 8 H16 O	2	2	02	4	7.00E-01/06	128.2	JSFAA	63	14	761
227	HEPTANAL VH6 C 7 H14 O	2	2	02	4	3.00E+00/06	114.2	JSFAA	63	14	761
228	HEXANAL VH5 C 6 H12 O	2	2	02	4	4.50E+00/06	100.2	JSFAA	63	14	761
229	VALERALDEHYDE VH4 C 5 H10 O	2	2	02	4	1.20E+01/06	086.1	JSFAA	63	14	761
230	BUTYRALDEHYDE VH3 C 4 H 8 O	2	2	02	4	9.00E+00/06	072.1	JSFAA	63	14	761
231	PROPIONALDEHYDE VH2 C 3 H 6 O	2	2	02	4	9.50E+00/06	058.1	JSFAA	63	14	761
232	METHANETHIOL SH1 C H 4 S	2	2	02	4	2.00E-02/06	048.1	JSFAA	63	14	761

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
233	ETHYL ALCOHOL Q2 C 2 H 6 O										
		1	1	02	3	5.20E-03/10	046.1	FOTEA	55	9	23
234	ETHYL ALCOHOL Q2 C 2 H 6 O										
		1	1	02	9	4.00E-07/01	046.1	FOTEA	55	9	23
235	ETHANETHIOL SH2 C 2 H 6 S										
		1	2	01	3	4.60E-01/04	062.1	IECHA	19	11	336
236	PYRIDINE T6NJ C 5 H 5 N										
		1	2	01	9	2.30E-01/01	079.1	PAPER	30	BMTP	
237	SKATOLE T56 BMJ O C 9 H 9 N										
		1	2	01	9	1.90E-02/01	131.2	PAPER	30	BMTP	
238	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	1	02	1	6.80E+00/01	088.1	JSFAA	64	29	679
239	1,2-ETHANEDITHIOL SH2SH C 2 H 6 S2										
		1	2	01	9	3.10E-02/01	094.2	PAPER	30	BMTP	
240	BENZENETHIOL SHR C 6 H 6 S										
		1	2	01	9	2.60E-04/01	110.2	PAPER	30	BMTP	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
241	BENZYL MERCAPTAN SH1R C 7 H 8 S	1	2	01	9	2.60E-03/01	124.2	PAPER	30	BMTP	
242	P@-TOLUENETHIOL SHR D C 7 H 8 S	1	2	01	9	2.70E-03/01	124.2	PAPER	30	BMTP	
243	CROTYL MERCAPTAN SH2U2 C 4 H 8 S	1	2	01	9	1.50E-05/01	088.2	PAPER	30	BMTP	
244	ETHYL SULFIDE 2S2 C 4 H10 S	1	2	01	9	2.80E-03/01	090.2	PAPER	30	BMTP	
245	BUTYL SULFIDE 4S4 C 8 H18 S	1	2	01	9	1.50E-02/01	146.3	PAPER	30	BMTP	
246	ISOPENTYL MERCAPTAN SH2Y C 5 H12 S	1	2	01	9	3.00E-03/01	174.4	PAPER	30	BMTP	
247	ALLYL SULFIDE 1U2S2U1 C 6 H10 S	1	2	01	9	1.40E-04/01	114.2	PAPER	30	BMTP	
248	ETHYL ISOTHIOCYANATE SCN2 C 3 H 5 N S	1	2	01	9	1.70E+00/01	087.1	PAPER	30	BMTP	

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
249	VANILLIN VHR DQ CO1 C 8 H 8 O3										
		1	2	01	3	1.10E-06/06	142.1	FOTEC	66	54	1549
250	PHENYL ISOTHICCYANATE SCNR C 7 H 5 N S										
		1	2	01	9	9.40E-02/01	135.2	PAPER	30	BMTP	
251	METHYL THIOCYANATE NCS1 C 2 H 3 N S										
		1	2	01	3	2.50E-01/01	073.1	PAPER	30	BMTP	480
252	W&-BROMOACETOPHENONE E1VR C 8 H 7 BR O										
		1	2	01	3	1.50E-02/01	199.0	PAPER	30	BMTP	480
253	W&-CHLOROACETOPHENONE G1VR C 8 H 7 CL O										
		1	2	01	3	1.60E-02/01	154.6	PAPER	30	BMTP	480
254	O@-CHLOROPHENOL QR BG C 6 H 5 CL O										
		1	2	01	3	3.60E-03/01	128.5	PAPER	30	BMTP	480
255	MUSTARD GAS G2S2G C 4 H 8 CL2 S										
		1	2	01	3	2.30E-03/01	159.0	PAPER	30	BMTP	480
256	ETHYL SELENOMERCAPTAN 2-SE-H C 2 H 6 SE										
		1	2	01	3	1.20E-03/01	137.0	PAPER	30	BMTP	480

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
257	ALLYL ISOTHIOCYANATE SCN2U1 C 4 H 5 N S										
		1	2	01	3	8.00E-03/01	099.1	IECHA	19	11	336
258	ETHYL SELENOMERCAPTAN 2-SE-H C 2 H 6 SE										
		1	2	01	3	3.00E-04/01	109.0	PAPER	30	8MTP	480
259	DIMETHYL TRITHIOCARBONATE SUYS1&S1 C 3 H 6 S3										
		1	2	01	3	5.80E-03/01	138.2	PAPER	30	8MTP	480
260	CROTONALDEHYDE VH1U2 C 4 H 6 O										
		1	2	01	3	1.30E-01/01	070.0	PAPER	30	8MTP	480
261	PROPYL SULFIDE 3S3 C 6 H14 S										
		1	2	01	3	1.10E-02/01	118.2	PAPER	30	8MTP	480
262	ALLYL ISOTHIOCYANATE SCN2U1 C 4 H 5 N S										
		1	2	01	3	1.50E-01/01	099.1	PAPER	30	8MTP	480
263	ALLYL MERCAPTAN SH2U1 C 3 H 6 S										
		1	2	01	3	3.75E-03/01	074.1	PAPER	30	8MTP	480
264	COUMARIN T66 B0VJ C 9 H 6 02										
		1	2	01	3	3.30E-03/01	146.1	PAPER	30	8MTP	480

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
265	ISOPENTYL ACETATE 1Y2OV1 C 7 H14 O2										
		1	2	01	1	3.3CE-03/01	130.1	PAPER	30	8MTP	480
266	ISOPENTYL ISOVALERATE 1Y&2OV1Y C10 H20 O2										
		1	2	01	3	6.60E-03/01	172.2	PAPER	30	8MTP	480
267	OXIDIZED OIL C										
		1	2	01	2	8.80E-05/04	.	PAPER	30	8MTP	480
268	*AKROL* -MIXED TERPENES C										
		1	2	01	2	1.30E-04/04	.	PAPER	30	8MTP	480
269	PHENYL ETHER ROR C12 H10 O										
		1	2	01	3	1.00E-03/01	170.2	PAPER	30	8MTP	480
270	ALLYL ISOCYANIDE CN2U1 C 4 H 5 N										
		1	2	01	9	1.80E-02/01	067.0	PAPER	30	8MTP	480
271	PHENYL ISONITRILE CNR C 7 H 5 N										
		1	2	01	3	1.00E-03/01	103.1	PAPER	30	8MTP	480
272	ALLYLAMINE Z2U1 C 3 H 7 N										
		1	2	01	3	6.20E+00/01	057.0	PAPER	30	8MTP	480

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
273	PROPYNAL VH1UU1 C 3 H 2 O										
		1	2	01	3	1.60E-01/01	054.0	PAPER	30	BMTP	480
274	D&-DECALACTONE T6OVTJ F5 C10 H18 O2										
		1	1	99	3	1.40E+00/01	170.0	JFDSA	69	34	265
275	METHANETHIOL SH1 C H 4 S										
		1	2	01	3	4.1CE-02/01	048.1	PAPER	30	BMTP	480
276	ETHYL ACETATE 2OV1 C 4 H 8 O2										
		1	1	03	3	4.7CE+00/01	088.1	JDSCA	69	52	1198
277	DIMETHYL DISULFIDE 1SS1 C 2 H 6 S2										
		1	1	04	1	2.1CE+01/06	078.1	FOREA	57	22	316
278	METHYL SULFIDE 1S1 C 2 H 6 S										
		1	2	01	3	3.7CE-03/01	062.1	PAPER	30	BMTP	480
279	D&-NONALACTONE T6OVTJ F4 C 9 H16 O2										
		1	2	02	3	1.00E-09/23	156.2	PEORA	65	56	321
280	EXALTONE L-15-VTJ C15 H28 O										
		1	2	02	3	1.0CE-01/06	224.0	PEORA		56	

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
281	ACETONE 1V1 C 3 H 6 O										
		1	2	02	3	5.00E+02/01	058.0	FOTEA	66		1549
282	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	1	03	3	1.29E+01/01	088.1	JDSCA	69	52	1198
283	2-HEPTANONE 5V1 C 7 H14 O										
		1	2	01	3	8.97E-01/06	114.1	FOTEA	66		1549
284	METHYL SALICYLATE QR BVO1 C 8 H 8 O3										
		1	2	02	3	1.00E-01/01	152.1	FOTEA	66		1549
285	FRUCTOSE T5OTJ 8Q 81Q CQ DQ E1Q C 6 H12 O6										
		1	1	02	3	1.30E-01/10	180.1	FOTEA	55	9	23
286	GLUCOSE T6OTJ 8Q CQ DQ EQ F1Q C 6 H12 O6										
		1	1	02	1	4.00E-05/01	180.1	FOTEA	55	9	23
287	METHANETHIOL SH1 C H 4 S										
		1	1	02	1	2.00E+00/06	048.1	FOREA	57	22	316
288	DIMETHYL DISULFIDE 1SS1 C 2 H 6 S2										
		1	1	99	3	1.70E-01/01	062.1	JFDSA	69	34	265

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
289	METHYL ETHYL KETONE 2V1 C 4 H 8 O										
		1	1	99	3	3.00E+01/01	072.1	JFDSA	69	34	265
290	HEXANAL VH5 C 6 H12 O										
		1	1	03	3	5.00E-02/01	100.2	JDSCA	63	46	291
291	BUTYRALDEHYDE VH3 C 4 H 8 O										
		1	2	02	3	7.00E-02/01	072.1	FOTEA	66		1549
292	PROPIONALDEHYDE VH2 C 3 H 6 O										
		1	2	02	3	1.70E-01/01	058.0	FOTEA	66		1549
293	MALIC ACID QVYQ1VQ C 4 H 6 O5										
		1	1	02	3	2.30E-03/05	134.1	BOOK8	59	1	507
294	ETHYL ACETATE 2OV1 C 4 H 8 O2										
		1	2	01	3	6.86E-01/04	088.1	IECHA	19	11	336
295	ACETALDEHYDE VH1 C 2 H 4 O										
		1	2	01	3	6.60E-02/01	044.0	PAPER	30	BMTP	480
296	LACTIC ACID QYVQ C 3 H 6 O3										
		1	1	02	3	2.80E-03/05	090.1	BOOK8	59	1	507

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
297	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		1	1	02	3	2.30E-03/10	210.1	FOTEA	55	9	23
298	TARTARIC ACID QVYQYQVQ C 4 H 6 06										
		2	1	02	3	2.60E-04/09	150.0	CJREA	46	24F	205
299	GRAPE SEED TANNIN C										
		1	1	02	3	2.00E-02/10	.	FOTEA	55	9	23
300	POTASSIUM BITARTRATE QVYQYQVO &-KA- C 4 H 5 K 06										
		1	1	02	3	9.00E-03/10	188.1	FOTEA	55	9	23
301	SUCCINIC ACID QV2VQ C 4 H 6 04										
		1	1	02	3	3.40E-03/10	118.0	FOTEA	55	9	23
302	SUCROSE T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D* C12 H22 011										
		2	1	02	3	1.95E-02/09	342.3	CJREA	46	24F	203
303	SULFURIC ACID WSQQ H2 04 S 1600										
		1	1	02	3	1.30E-03/10	098.0	FOTEA	55	9	23
304	SULFUROUS ACID QSQO H2 03 S 1702										
		1	1	02	3	1.10E-03/10	082.0	FOTEA	55	9	23

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
305	GLYCEROL Q1YQ1Q C 3 H 8 O3	1	1	02	3	4.40E-01/10	092.0	FOTEA	55	9	23
306	ETHYL HEXANOATE 5V02 C 8 H16 O2	1	1	03	3	2.10E-02/01	144.2	JDSCA	69	52	1198
307	DIMETHYLDITHIOPHOSPHORIC A 1SPQO&S1 C 2 H 6 O2 P S2	1	2	02	3	1.00E-01/05	157.0	REPT		TT61	
308	4,4-DIMETHYLDIOXANE-1,3 T6O COTJ D D C 6 H12 O2	1	2	02	3	2.50E+00/05	116.0	REPT		TT61	
309	S,S-DIETHYL DITHIOPHOSPHATE 2SPQO&S2 C 4 H11 O2 P S2	1	2	02	2	2.50E-01/05	186.0	REPT		TT61	
310	X-DICHLOROCYCLOHEXANE L6TJ XG XG C 6 H10 CL2	1	2	02	3	2.50E-02/05	153.0	REPT		TT61	
311	1,3-DICHLOROBUTENE-2 GY1U1G C 4 H 6 CL2	1	2	02	3	5.00E-02/05	125.0	REPT		TT61	
312	P@-CHLOROPHENYL-P@-CL-BZN-S#@ GR DSWQR DG C12 H 8 CL2 O3 S	1	2	02	3	5.00E-01/05	303.1	REPT		TT61	

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
313	TRICHLORGON GXGGYQPO&O1&O1 C 4 H 8 CL3 O4 P	1	2	02	3	4.00E-02/05	257.4	REPT		TT61	
314	X-CHLORONITROSOCYCLOHEXANE L6TJ XNO XG C 6 H10 CL N O	1	2	02	3	5.00E-03/05	161.6	REPT		TT61	
315	ETHYL BUTYRATE 3VO2 C 6 H12 O2	1	1	03	3	1.50E-02/01	116.2	JOSCA	69	52	1198
316	TRICHLOROETHYLENE GYGU1G C 2 H CL3	1	2	02	3	5.00E-01/05	133.4	REPT		TT61	
317	SODIUM 2,4-D QV1OR 8G OG &-NA- C 8 H 5 CL2 NA O3	1	2	02	3	1.50E+00/05	243.0	REPT		TT61	
318	POT. IPR2-OI THIOPHOSPHATE 1Y&SPWSY &-KA- C 6 H14 K O2 P S2	1	2	02	2	2.50E-02/05	252.0	REPT		TT61	
319	POLYCHLOROPINENE L46 ATJ-/G # && C10 H15 CL	1	2	02	3	5.00E-01/05	.	REPT		TT61	
320	NITROCYCLOHEXANE L6TJ ANW C 6 H11 N O2	1	2	02	3	1.50E-01/05	031.1	REPT		TT61	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
321	METHYLAMINE Z1 C H 5 N	1	2	02	3	1.00E+00/05	031.1	REPT		TT61	
322	METHYL DEMETON 2S2SPO&O1&O1 && C 6 H15 O3 P S2	1	2	02	3	1.00E-02/05	230.3	REPT		TT61	
323	SYM-TETRACHLOROETHANE GYGYGG C 2 H 2 CL4	1	2	02	2	5.00E-01/05	167.9	REPT		TT61	
324	CYCLOHEXANOL L6TJ AQ C 6 H12 O	1	2	02	3	3.50E+00/05	100.2	REPT		TT61	
325	ETHYLBENZENE 2R C 8 H10	1	2	02	2	2.00E-01/05	106.0	REPT		TT61	
326	ISOPRENE 1UY1U1 C 5 H 8	1	2	02	3	5.00E-03/05	136.0	REPT		TT61	
327	HEXACHLOROETHANE GXGGXGGG C 2 CL6	1	2	02	2	1.00E-02/05	236.8	REPT		TT61	
328	BUTYRALDEHYDE VH3 C 4 H 8 O	1	1	05	3	2.40E-02/01	072.1	JAOCA	64	41	326

Coding Key

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
329	PROPIONALDEHYDE VH2 C 3 H 6 O	1	1	05	3	1.60E+00/01	058.8	JAOCA	64	41	326
330	OECANAL VH9 C10 H20 O	1	1	05	3	1.00E+00/01	156.2	JAOCA	64	41	326
331	NONANAL OXIME QNU9 C 9 H19 N O	1	1	05	3	3.20E-01/01	157.2	JAOCA	64	41	326
332	OCTANAL VH7 C 8 H16 O	1	1	05	3	6.80E-02/01	128.2	JAOCA	64	41	326
333	1-HEPTANOL Q7 C 7 H16 O	1	1	05	3	4.20E-02/01	114.1	JAOCA	64	41	326
334	HEXANAL VH5 C 6 H12 O	1	1	05	3	1.50E-01/01	100.1	JAOCA	64	41	326
335	VALERALDEHYOE VH4 C 5 H10 O	1	1	05	3	1.50E-01/01	086.1	JAOCA	64	41	326
336	ETHYL VALERATE 4V02 C 7 H14 02	1	1	03	3	2.50E-02/01	130.1	ACSAA	64	18	612

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
337	ETHYL OCTANOATE 7V02 C10 H20 02	1	1	03	3	5.00E-01/01	172.2	ACSAA	64	18	612
338	ETHYL HEXANOATE 5V02 C 8 H16 02	1	1	03	3	7.50E-02/01	144.2	ACSAA	64	18	612
339	ETHYL BUTYRATE 3V02 C 6 H12 02	1	1	03	3	2.50E-02/01	116.1	ACSAA	64	18	612
340	2-TRIDECANONE 11V1 C13 H26 0	1	1	99	3	1.82E+02/01	198.0	JFDSA	69	34	265
341	2-UNDECANONE 9V1 C11 H22 0	1	1	99	3	1.00E+02/01	170.3	JFDSA	69	34	265
342	2-DECANONE 8V1 C10 H20 0	1	1	99	3	1.10E+01/01	156.3	JFDSA	69	34	265
343	PENTYL ACETATE 5OV1 C 7 H14 02	1	2	01	3	5.00E-02/11	130.1	APRCA	67	82	43
344	PENTYL ACETATE 5OV1 C 7 H14 02	1	2	02	3	5.00E+00/12	130.1	APRCA	67	82	43

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
345	IONONE, 8&- L6UTJ A B1U1V1 C C C13 H20 O										
		1	2	02	3	7.00E-03/12	192.3	APRCA	67	82	43
346	METHANETHIOL SH1 C H 4 S										
		1	2	02	3	2.00E-02/12	048.1	APRCA	67	82	43
347	IONONE, 8&- L6UTJ A B1U1V1 C C C13 H20 O										
		1	2	01	3	7.00E-05/11	192.3	APRCA	67	82	43
348	1-PROPANOL Q3 C 3 H 8 O										
		1	2	02	3	9.00E+03/12	060.0	APRCA	67	82	43
349	FORMIC ACID VHQ C H 2 O2										
		1	2	02	3	4.50E+05/12	046.0	APRCA	67	82	43
350	ETHYL ALCOHOL Q2 C 2 H 6 O										
		1	2	01	3	1.00E+02/11	046.0	APRCA	67	82	43
351	FORMIC ACID VHQ C H 2 O2										
		1	2	01	3	4.50E+02/11	046.0	APRCA	67	82	43
352	ETHYL ALCOHOL Q2 C 2 H 6 O										
		1	2	02	3	1.00E+05/12	046.0	APRCA	67	82	43

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
353	1-PROPANOL Q3 C 3 H 8 O										
		1	2	01	3	9.00E+00/11	060.0	APRCA	67	82	43
354	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	2	02	3	2.40E+02/12	088.1	APRCA	67	82	43
355	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	2	01	3	2.40E-01/11	088.1	APRCA	67	82	43
356	METHYL SULFIDE 1S1 C 2 H 6 S										
		1	2	01	3	3.00E-03/11	062.1	APRCA	67	82	43
357	METHYL SULFIDE 1S1 C 2 H 6 S										
		1	2	02	3	3.00E-01/12	062.1	APRCA	67	82	43
358	DECANAL VH9 C10 H20 O										
		1	2	02	3	1.00E-01/12	156.2	APRCA	67	82	43
359	DECANAL VH9 C10 H20 O										
		1	2	01	3	1.0CE-03/11	156.2	APRCA	67	82	43
360	METHANETHIOL SH1 C H 4 S										
		1	2	01	3	2.00E-04/11	048.1	APRCA	67	82	43

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Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
361	STEARIC ACID QV17 C18 H36 O2										
		1	2	02	3	2.00E+01/05	284.5	REPT		TT61	
362	PALMITIC ACID QV15 C16 H32 O2										
		1	2	02	3	1.00E+01/05	256.4	REPT		TT61	
363	2-NONANONE 7V1 C 9 H18 O										
		1	1	99	3	7.70E+00/01	142.2	JFDSA	69	34	265
364	2-OCTANONE 6V1 C 8 H16 O										
		1	1	99	3	2.50E+00/01	128.2	JFDSA	69	34	265
365	2-PENTANONE 3V1 C 5 H10 O										
		1	1	99	3	6.10E+01/01	086.0	JFDSA	69	34	265
366	ACETONE 1V1 C 3 H 6 O										
		1	1	99	3	1.25E+02/01	058.1	JFDSA	69	34	265
367	HEPTANAL VH6 C 7 H14 O										
		1	1	99	3	9.00E-01/01	114.2	JFDSA	69	34	265
368	HEXANAL VH5 C 6 H12 O										
		1	1	99	3	8.00E-01/01	100.2	JFDSA	69	34	265

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
369	1-HEPTANOL Q7 C 7 H16 O										
		1	1	99	3	1.00E+01/01	116.2	JFDSA	69	34	265
370	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	1	99	3	6.60E-01/01	088.1	JFDSA	69	34	265
371	PENTYL ACETATE 5OV1 C 7 H14 O2										
		1	2	92	3	5.00E+00/06	130.1	JAFCA	66	14	253
372	2-METHYLBUTYL ACETATE 2Y1OV1 C 7 H14 O2										
		1	2	92	3	5.0CE+00/06	130.1	JAFCA	66	14	253
373	3-METHYL-2-BUTYL ACETATE 1Y&YOV1 C 7 H14 O2										
		1	2	92	3	6.0CE+00/06	130.2	JAFCA	66	14	253
374	ISOBUTYL ACETATE 1Y1OV1 C 6 H12 O2										
		1	2	92	3	2.0CE+00/06	130.1	JAFCA	66	14	253
375	TERT-PENTYL ACETATE 2XOV1 C 7 H14 O2										
		1	2	92	3	3.00E+C1/06	130.0	JAFCA	66	14	253
376	TER-BUTYL ACETATE 1XOV1 C 6 H12 O2										
		1	2	02	3	4.00E+00/06	130.0	JAFCA	66	14	253

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
377	3-PENTYL ACETATE 2Y2&OV1 C 7 H14 O2										
		1	2	02	3	9.00E+00/06	130.8	JAFCA	66	14	253
378	2-PENTYL ACETATE 3YOV1 C 7 H14 O2										
		1	2	02	3	2.00E+00/06	130.1	JAFCA	66	14	253
379	2-OCTANONE 6V1 C 8 H16 O										
		1	1	05	3	3.50E+01/01	128.2	CHINA	58		1289
380	2-OCTANONE 6V1 C 8 H16 O										
		1	1	99	3	1.20E+01/01	128.2	CHINA	58		1289
381	2-OCTANONE 6V1 C 8 H16 O										
		1	1	02	3	1.00E+00/01	128.2	CHINA	58		1289
382	2-PENTYLFURAN T5OJ 85 C 9 H14 O										
		1	1	05	3	1.00E+00/01	138.0	CHINA	58		1289
383	ETHYL BENZOATE 2OVR C 9 H10 O2										
		1	2	01	3	6.20E-01/01	150.1	RCHEA	67	16	54
384	METHYL SULFIDE 1S1 C 2 H 6 S										
		1	2	02	3	1.20E-02/01	062.1	FOTEA	66		1549

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
385	2-DECANONE 8V1 C10 H20 O										
		1	1	99	3	9.30E+00/01	156.3	JFDSA	69	34	265
386	2-OCTANONE 6V1 C 8 H16 O										
		1	1	99	3	3.40E+00/01	128.2	JFOSA	69	34	265
387	1-OCTENOL-3 QY5&1U1 C 8 H16 O										
		1	1	02	3	1.00E+00/01	128.0	JORSA	64	31	253
388	DIACETYL 1VV1 C 4 H 6 O2										
		3	2	02	3	3.00E-04/03	086.0	BIZEA	29	210	234
389	BENZENETHIOL SHR C 6 H 6 S										
		1	2	02	3	1.20E-00/01	110.2	BOOKE	65		185
390	BENZENETHIOL SHR C 6 H 6 S										
		1	2	02	3	6.20E+01/01	110.2	BOOKE	65		185
391	3,T-BUTYL T-N-T WNR B CNW ENW DX C11 H16 N3 O6										
		1	2	02	3	4.00E+01/01	283.0	BOOKE	65		185
392	3,T-BUTYL T-N-T WNR B CNW ENW DX C11 H16 N3 O6										
		1	2	02	3	1.00E+01/06	283.0	BOOKE	65		185

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Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
393	3,T-BUTYL T-N-T WNR 8 CNW ENW DX C11 H16 N3 O6										
		1	2	02	3	9.38E-01/06	283.0	BOOKE	65		185
394	3,T-BUTYL T-N-T WNR 8 CNW ENW DX C11 H16 N3 O6										
		1	2	02	3	7.50E+00/06	283.0	BOOKE	65		185
395	ETHER 2O2 C 4 H10 O										
		1	2	02	3	5.83E+00/01	074.1	BOOKE	65		185
396	ETHER 2O2 C 4 H10 O										
		1	2	02	3	1.COE-03/01	074.1	BOOKE	65		185
397	BUTANE 4H C 4 H10										
		1	2	02	3	6.16E+00/01	058.1	BOOKE	65		185
398	ETHANE 2H C 2 H 6										
		1	2	02	3	8.99E+02/01	030.1	BOOKE	65		185
399	ETHANETHIOL SH2 C 2 H 6 S										
		1	2	02	3	1.90E-04/01	062.1	BOOKE	65		185
400	ETHANETHIOL SH2 C 2 H 6 S										
		1	2	02	3	4.60E-02/01	062.1	BOOKE	65		185

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
401	ETHANETHIOL SH2 C 2 H 6 S	1	2	02	3	4.35E+01/01	062.1	BOOKE	65		185
402	ETHANETHIOL SH2 C 2 H 6 S	1	2	02	3	3.59E+00/01	062.1	BOOKE	65		185
403	ANILINE ZR C 6 H 7 N	1	2	02	3	9.70E-04/01	093.1	BOOKE	65		185
404	ANILINE ZR C 6 H 7 N	1	2	02	3	4.61E-05/01	093.1	BOOKE	65		185
405	FORMIC ACID VHQ C H 2 02	1	2	02	3	6.25E-01/01	046.0	BOOKE	65		185
406	FORMIC ACID VHQ C H 2 02	1	2	02	3	2.50E-02/01	046.0	BOOKE	65		185
407	ACETALDEHYDE VH1 C 2 H 4 O	1	2	02	3	6.88E-04/01	044.1	BOOKE	65		185
408	ACETALDEHYDE VH1 C 2 H 4 O	1	2	02	3	4.00E-03/01	044.1	BOOKE	65		185

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Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
409	ACETALDEHYDE VH1 C 2 H 4 O										
		1	2	02	3	1.20E-04/01	044.1	BOOKE	65		185
410	IONONE, A&- L6UTJ A E E F1U1V1 C13 H20 O										
		1	2	02	3	5.00E+01/01	192.3	BOOKE	65		185
411	BENZALDEHYDE VHR C 7 H 6 O										
		1	2	02	3	4.29E-03/01	106.1	BOOKE	65		185
412	BENZALDEHYDE VHR C 7 H 6 O										
		1	2	02	3	3.00E-03/01	106.1	BOOKE	65		185
413	BENZALDEHYDE VHR C 7 H 6 O										
		1	2	02	3	4.36E-04/01	106.1	BOOKE	65		185
414	IONONE, A&- L6UTJ A E E F1U1V1 C13 H20 O										
		1	2	02	3	9.38E+01/06	192.3	BOOKE	65		185
415	ETHYL ALCOHOL Q2 C 2 H 6 O										
		1	2	02	3	9.23E+00/01	046.1	BOOKE	65		185
416	ETHYL ALCOHOL Q2 C 2 H 6 O										
		1	2	02	3	2.50E-01/01	046.1	BOOKE	65		185

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
417	ETHYL ALCOHOL Q2 C 2 H 6 O										
		1	2	02	3	5.75E+00/01	046.1	BOOKE	65		185
418	BENZALOEHYDE VHR C 7 H 6 O										
		1	2	02	3	1.80E-04/01	106.1	BOOKE	65		185
419	ETHYL ALCOHOL Q2 C 2 H 6 O										
		1	2	02	3	1.83E-01/01	046.1	BOOKE	65		185
420	QUININE Sa T66 8NJ HO1 EYQ- OT66 A 8 CNTJ A1U1* C40 H50 N4 O8 S										
		1	1	02	3	2.40E-04/	746.9	NATUA	55	176	313
421	8UTYRIC ACID QV3 C 4 H 8 O2										
		1	2	01	3	9.00E-03/04	088.1	BOOKE	65		186
422	VALERALDEHYDE VH4 C 5 H10 O										
		1	1	03	3	1.3GE-01/01	086.1	JOSCA	63	46	291
423	8UTYRIC ACIO QV3 C 4 H 8 O2										
		1	2	01	3	1.20E-10/09	088.1	BOOKE	65		187
424	ASPIRIN QVR 8OV1 C 9 H 8 O4										
		1	1	02	3	2.0GE-02/10	180.2	BOOKE	65		109

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
425	3,T-BUTYL T-N-T WNR B CNW ENW DX C11 H16 N3 O6										
		2	2	01	0	5.00E-15/13	286.1	MONO	57	SCI1	
426	HEPTANAL VH6 C 7 H14 O										
		1	1	03	3	1.20E-01/01	114.2	JCSCA	63	46	291
427	PYRIDINE T6NJ C 5 H 5 N										
		1	2	01	3	7.40E-04/04	079.1	BOOKE	65		186
428	SAFROLE T56 BO DO CHJ G2U1 C10 H10 O2										
		1	2	01	3	6.35E-09/09	162.2	BOOKE	65		187
429	BENZENE R C 6 H 6										
		1	2	01	3	8.8CE-03/04	078.1	BOOKE	65		186
430	HYDROGEN SULFIDE SHH H2 S 1777										
		1	2	01	3	1.8CE-04/04	034.1	BOOKE	65		186
431	PENTYL ACETATE 5OV1 C 7 H14 O2										
		1	2	01	3	3.90E-02/04	130.2	BOOKE	65		186
432	PENTYL ACETATE 5OV1 C 7 H14 O2										
		1	2	01	3	3.9CE-02/04	130.2	IECHA	19	11	336

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
433	METHYL SALICYLATE QR BVO1 C 8 H 8 O3	1	2	01	3	1.00E-01/04	152.1	BOOKE	65		187
434	METHYL SALICYLATE QR BVO1 C 8 H 8 O3	1	2	01	3	1.00E-01/04	152.1	IENNA	19	11	336
435	BUTYL SULFIDE 4S4 C 8 H18 S	1	2	01	3	9.00E-05/04	146.3	BOOKE	65		186
436	ETHYL ACETATE 2OV1 C 4 H 8 O2	1	1	02	3	1.10E-02/05	088.1	FOTEA	55	9	23
437	UREA ZVZ C H 4 N2 O	1	1	02	3	1.20E-01/09	060.1	BOOKB	59	1	507
438	VANILLIN VHR DQ CO1 C 8 H 8 O3	1	1	02	3	1.00E-01/05	154.1	BOOKE	65		109
439	M@-XYLENE 1R C C 8 H10	1	2	01	3	. E /	106.2	BOOKE	65		188
440	MUSK XYLENE WNR B D CNW ENW FX C12 H15 N3 O6	1	2	01	3	7.50E-08/04	297.3	BOOKE	65		186

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
441	PICRIC ACID WNR B CNW ENW DX C11 H13 N3 O6										
		2	2	01	9	5.10E-05/01	283.2	PAPER	30	BMTP	
442	POTASSIUM BITARTRATE QVYQYQVO &-KA- C 4 H 5 K O6										
		1	1	99	1	7.50E-07/01	188.2	FOTEA	55	9	23
443	ETHYL ACETATE 2OV1 C 4 H 8 O2										
		1	2	01	3	6.00E-03/04	0BB.1	BOOKE	65		186
444	PICRIC ACID WNR BQ CNW ENW C 6 H 3 N3 O7										
		1	1	02	3	6.30E-04/10	229.1	BOOKE	65		109
445	PHENYLTHIOUREA SUYZMR C 7 H 8 N2 S										
		2	1	02	3	3.10E-04/10	152.2	BOOKE	65		109
446	HEXANOIC ACID QV5 C 6 H12 O2										
		1	1	03	9	1.40E+01/01	116.2	JFDSA	69	34	265
447	LACTOSE L6OTJ BQ CQ DQ FIQ EO- BT6OTJ CQ DQ EQ* C12 H22 O11										
		1	1	02	3	7.20E-02/09	342.3	FOREA	43	8	179
448	CALCIUM CHLORIDE .CA..G2 CA CL2										
		1	1	02	3	1.00E-02/09	111.0	BOOKB	59	1	507

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
449	CALCIUM CHLORIDE •CA••G2 CA CL2										
		1	1	02	3	7.60E-03/09	111.0	FOREA	43	8	179
450	ATROPINE T56 A ANTJ A GOVYR&1Q C17 H23 N O3										
		1	1	02	3	3.00E-02/05	289.4	BOOKE	65		106
451	ARBUTIN T6OTJ BOR OQ& CQ OQ EQ F1Q C12 H16 O7										
		1	1	02	3	3.20E-01/10	272.3	BOOKE	65		109
452	AMMONIUM CHLORIDE •Z&••G CL H4 N										
		1	1	02	3	4.00E-03/09	053.5	BOOK8	59	1	507
453	1,5-DIMETHYL-2-PH-3-PYRAZOLONE T5NNVJ A BR& E C11 H12 N2 O										
		1	1	02	3	3.20E-01/10	188.2	BOOKE	65		109
454	BERYLLIUM CHLORIDE •8E••G2 BE CL2										
		1	1	02	3	3.00E-03/09	080.0	BOOK8	59	1	507
455	ETHYL ACETATE 2OV1 C 4 H 8 O2										
		1	1	03	4	4.70E+00/01	088.1	JFOSA	69	34	265
456	2-BUTANETHIOL SHY2 C 4 H10 S										
		1	2	01	3	• E /	090.2	BOOKE	65		188

Coding Key

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
457	CASCARA										
	C										
		1	1	02	3	5.00E-03/10	.	BOOKE	65		109
458	CAFFEINE T56 BN DN FNVNVJ B F H C 8 H10 N4 O2										
		2	1	02	1	1.53E-03/09	194.2	FOREA	41	6	207
459	CAFFEINE T56 BN DN FNVNVJ B F H C 8 H10 N4 O2										
		2	1	02	3	1.80E-03/09	194.2	CJREA	46	24	203
460	CAFFEINE T56 BN DN FNVNVJ B F H C 8 H10 N4 O2										
		2	1	02	9	1.41E-03/09	194.2	AJCNA	59	7	280
461	WOOD TAR										
	C										
		1	2	02	3	2.00E-02/05	.	REPT		TT61	
462	ACETIC ACID QV1 C 2 H 4 O2										
		1	1	02	3	1.80E-03/14	060.1	BOOKB	59	1	507
463	CITRIC ACID QV1XQVQ1VQ C 6 H 8 O7										
		1	1	02	3	2.30E-03/14	192.1	BOOKB	59	1	507
464	TARTARIC ACID QVYQYQVQ C 4 H 6 O6										
		1	1	02	3	1.01E+02/01	168.1	BOOKE	65		76

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MDL WT	JOURNAL	YEAR	VOLUME	PAGE
465	MALIC ACID QVYQ1VQ C 4 H 6 D5										
		1	1	02	3	1.07E+02/01	134.1	BOOKE	65		76
466	LACTIC ACID QYVQ C 3 H 6 03										
		1	1	02	3	1.44E+02/01	090.8	BDOKE	65		76
467	TARTARIC ACID QVYQYQVQ C 4 H 6 D6										
		1	1	02	3	2.70E+01/01	168.1	BOOKE	65		75
468	TARTARIC ACID QVYQYQVQ C 4 H 6 O6										
		1	1	02	3	1.88E+02/01	168.1	BOOKE	65		75
469	TARTARIC ACID QVYQYQVQ C 4 H 6 D6										
		2	1	02	1	8.74E+01/01	168.1	BDOKE	65		75
470	TARTARIC ACID QVYQYQVQ C 4 H 6 D6										
		2	1	01	9	1.13E+02/01	168.1	BDDKE	65		75
471	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		1	1	02	3	9.60E+00/01	192.1	BODKE	65		61
472	CITRIC ACID QV1XQVQ1VQ C 6 H 8 O7										
		1	1	02	3	2.23E+02/01	192.1	BDOKE	65		61

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
473	TARTARIC ACID QVYQYQVQ C 4 H 6 O6										
		1	1	02	3	3.36E+01/01	168.1	BOOKE	65		61
474	TARTARIC ACID QVYQYQVQ C 4 H 6 O6										
		1	1	02	3	1.20E-03/14	168.1	BOOKB	59	1	507
475	CAFFEINE T56 BN DN FNVNVJ B F H C 8 H10 N4 O2										
		1	1	02	1	2.96E+02/01	194.1	BOOKE	41		106
476	CAFFEINE T56 BN DN FNVNVJ B F H C 8 H10 N4 O2										
		1	1	02	3	3.88E+01/01	194.1	BOOKE	65		106
477	QUININE HCL T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U* C20 H29 CL N2 O2										
		1	1	02	3	1.08E+01/01	360.7	BOOKE	65		107
478	QUININE S@ T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1* C40 H50 N4 O8 S										
		1	1	02	3	5.98E+00/01	746.5	BOOKE	65		107
479	SACCHARIN T56 BSWMVJ C 7 H 5 N O3 S										
		1	1	02	3	4.70E+00/01	138.2	BOOKE	65		88
480	FORMIC ACID VHQ C H 2 O2										
		1	1	02	3	8.30E+01/01	046.0	BOOKE	65		76

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
481	GLYCEROL Q1YQ1Q C 3 H 8 O3	1	1	02	9	4.40E+03/01	092.1	BOOKE	65		97
482	CAFFEINE T56 BN DN FNVNVJ B F H C 8 H10 N4 O2	1	1	02	3	1.36E+02/01	194.1	BOOKE	65		107
483	BUTYRIC ACID QV3 C 4 H 8 O2	1	1	02	3	1.76E+02/01	088.1	BOOKE	65		76
484	CAFFEINE T56 BN DN FNVNVJ B F H C 8 H10 N4 O2	1	1	02	3	7.00E-04/01	194.1	BOOKB	59	1	507
485	CAFFEINE T56 BN DN FNVNVJ B F H C 8 H10 N4 O2	1	1	02	3	2.20E+02/01	194.1	BOOKE	65		106
486	CAFFEINE T56 8N DN FNVNVJ B F H C 8 H10 N4 O2	1	1	02	3	1.96E-04/09	194.2	BOOKE	65		106
487	SACCHARIN T56 BSWMVJ C 7 H 5 N O3 S	1	1	02	3	6.30E+00/01	241.2	BOOKE	65		109
488	COAL TAR C	9	2	02	3	4.00E-03/05	.	BOOKF		5	

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
489	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		1	1	02	3	4.00E+01/01	192.1	BOOKE	65		75
490	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		1	1	02	3	2.30E+01/01	192.1	BOOKE	65		75
491	MALIC ACID QVYQ2VQ C 4 H 4 04										
		1	1	02	9	2.60E+01/01	134.1	BOOKE	65		75
492	LACTIC ACID QYVQ C 3 H 6 03										
		1	1	02	1	3.80E+01/01	090.8	BOOKE	65		75
493	TARTARIC ACID QVYQYQVQ C 4 H 6 06										
		1	1	02	3	8.00E+01/01	168.1	BOOKE	65		75
494	QUININE HCL T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U* C20 H29 CL N2 O2										
		1	1	02	3	7.20E+01/06	360.7	BOOKE	65		105
495	QUININE Sa T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1* C40 H50 N4 O8 S										
		1	1	02	3	5.00E-01/01	746.5	BOOKE	65		105
496	QUININE Sa T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1* C40 H50 N4 O8 S										
		1	1	02	3	1.85E+00/01	746.5	BOOKE	65		105

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
497	CAFFEINE T56 BN DN FNVNVJ B F H C B H10 N4 O2	1	1	02	3	2.91E+01/01	194.1	BOOKE	65		105
498	SUCROSE T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D* C12 H22 O11	1	1	02	1	3.00E-01/10	342.3	FOTEA	55	9	23
499	QUININE HCL T66 BNJ HO1 EYQ- OT66 A B CNTJ A1U* C20 H29 CL N2 O2	2	1	02	9	1.10E+01/01	360.7	BOOKE	65		105
500	QUININE HCL T66 BNJ HO1 EYQ- OT66 A B CNTJ A1U* C20 H29 CL N2 O2	1	1	02	3	3.00E-05/09	360.9	BOOKB	59	1	507
501	QUININE HCL T66 BNJ HO1 EYQ- OT66 A B CNTJ A1U* C20 H29 CL N2 O2	1	1	02	3	1.44E+02/01	360.7	BOOKE	65		105
502	CAFFEINE T56 BN ON FNVNVJ B F H C B H10 N4 O2	1	1	02	3	3.61E+01/01	194.1	BOOKE	65		106
503	CAFFEINE T56 BN DN FNVNVJ B F H C B H10 N4 O2	2	1	02	1	3.20E-03/09	194.2	FOREA	37	2	207
504	QUININE SA T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1* C40 H50 N4 O8 S	1	1	02	3	8.00E-06/09	746.9	BOOKB	59	1	507

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
505	P@-CHLOROPHENYL-P@-CL-BZN-S#@ GR DSWOR DG C12 H 8 CL2 O3 S										
		9	1	02	3	1.20E-01/05	303.2	REPT		TT61	
506	METHYL SULFIDE 1S1 C 2 H 6 S										
		1	1	99	4	9.00E-03/01	062.1	JFDSA	69	34	265
507	ETHYLBENZENE 2R C 8 H10										
		9	1	02	3	1.00E-01/05	106.0	REPT		TT61	
508	CITRAL VH1UY&3UY C10 H16 O										
		1	2	01	3	3.00E-06/04	152.2	BOOKE	65		186
509	NITRIC ACID WNQ H N O3 1100										
		1	1	02	3	1.10E-03/14	063.1	BOOKB	59	1	507
510	O@-NITROPHENOL WNR BQ C 6 H 5 N O3										
		1	2	01	3	. E /	139.1	BOOKE	59		188
511	ETHYLHYDROCUPREINE T66 BNJ HO2 EYQ- DT66 A B C* C21 H28 N2 O2										
		1	1	02	3	3.10E-04/10	340.5	BOOKE	65		109
512	OXALIC ACID QVVQ C 2 H 2 O4										
		1	1	02	3	2.60E-03/14	126.1	BOOKB	59	1	507

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
513	POTASSIUM CHLORIDE .KA..G CL K	1	1	02	3	1.70E-02/09	074.6	BOOKB	59	1	507
514	POTASSIUM CHLORIDE .KA..G CL K	1	1	02	3	3.20E-01/10	074.6	BOOKE	65		109
515	QUININE T66 BNJ HO1 EYQ- OT66 A B CNTJ A1U1 C20 H24 N2 O2	1	1	02	3	7.71E-06/09	324.4	BOOKE	65		105
516	QUININE T66 BNJ HO1 EYQ- OT66 A B CNTJ A1U1 C20 H24 N2 O2	1	1	02	3	4.00E-03/15	324.1	BOOKE	65		106
517	QUININE Sa T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1* C40 H50 N4 O8 S	1	1	02	3	1.25E-03/10	746.9	BOOKE	65		109
518	SAFROLE T56 BO OO CHJ G2U1 C10 H10 O2	1	2	01	3	5.00E-03/04	162.2	BOOKE	65		186
519	SODIUM CHLORIDE .NA..G CL NA	2	1	02	3	3.00E-02/09	058.5	BOOKB	59	1	507
520	SODIUM CHLORIDE .NA..G CL NA	1	1	02	3	1.00E-02/09	058.5	BOOKB	59	1	507

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
521	SODIUM BROMIDE .NA..E BR NA										
		1	1	02	3	2.40E-02/09	102.9	BOOK8	59	1	507
522	SODIUM CHLORIDE .NA..G CL NA										
		1	1	02	3	4.90E-02/10	058.5	BOOKE	65		83
523	SODIUM CHLORIDE .NA..G CL NA										
		1	1	02	3	7.70E-03/09	058.5	BOOKE	65		83
524	SODIUM CHLORIDE .NA..G CL NA										
		1	1	02	3	1.60E-01/10	058.5	BOOKE	65		109
525	SODIUM CHLORIDE .NA..G CL NA										
		1	1	02	3	1.10E-02/09	058.5	FOREA	43	8	179
526	SODIUM CHLORIDE .NA..G CL NA										
		2	1	02	9	2.10E-02/09	058.5	AJCNA	59	7	280
527	SODIUM CHLORIDE .NA..G CL NA										
		2	1	02	3	1.92E-02/09	058.5	CJREA	46	24	203
528	SODIUM CHLORIDE .NA..G CL NA										
		2	1	02	1	2.50E-02/09	058.5	FOREA	41	6	207

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
529	SODIUM CHLORIDE •NA••G CL NA	1	1	02	3	1.60E-02/16	058.5	AJPHA	39	126	1
530	SODIUM CHLORIDE •NA••G CL NA	2	1	02	1	1.41E-02/09	058.5	FOREA	37	2	207
531	ARACHIDIC ACID QV19 C20 H40 O2	9	2	02	9	2.00E+01/05	312.5	REPT		TT61	
532	POTASSIUM OIETHYLOITHIOPa 2SPWS2 &-KA- C 4 H10 K O2 P S2	9	1	02	3	5.00E-01/05	224.0	REPT		TT61	
533	SODIUM 2,4-O OV1OR BG OG &-NA- C 8 H 5 CL2 NA O3	9	1	02	9	2.00E+00/05	243.0	REPT		TT61	
534	POLYGLYCOL ALKYL PHENYL E• C	1	2	02	3	1.80E+01/05	•	REPT		TT61	
535	POLYGLYCOL ALKYL PHENYL E• C	1	2	02	3	4.50E-01/05	•	REPT		TT61	
536	NONADECANOIC ACID QV18 C19 H38 O2	9	2	02	3	2.00E+01/05	298.5	REPT		TT61	

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
537	SODIUM FLUORIDE .NA..F F NA										
		1	1	02	3	5.00E-03/09	042.0	BOOKB	59	1	507
538	SODIUM HYDROXIDE .NA..Q H NA O										
		1	1	02	3	B.00E-03/09	040.1	BOOKB	59	1	507
539	SODIUM IODIDE .NA..I I NA										
		1	1	02	3	2.B0E-02/09	149.9	BOOKB	59	1	507
540	STROPHANTHIN C23 H32 04										
		1	1	02	3	1.56E-04/10	404.5	BOOKE	65		109
541	STRYCHNINE S@ T6 G656 B7 C6 E5 D 5ABCEF A& FX * C42 H46 N4 08 S										
		1	1	02	3	3.10E-04/10	B57.0	BOOKE	65		109
542	STRYCHNINE T6 G656 B7 C6 E5 D 5ABCEF A& FX MNV* C21 H22 N2 02										
		1	1	02	3	B.00E-04/10	334.4	BOOKE	65		106
543	STRYCHNINE HCL T6 G656 B7 C6 E5 D 5ABCEF A& FX* C21 H23 CL N2 02										
		1	1	02	3	1.60E-06/09	370.B	BOOKB	59	1	507
544	STRYCHNINE HCL T6 G656 B7 C6 E5 D 5ABCEF A& FX* C21 H23 CL N2 02										
		1	1	02	3	6.C0E-04/05	370.B	BOOKE	65		106

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
545	SUCCINIC ACID QV2VQ C 4 H 6 04										
		1	1	02	3	3.20E-03/14	118.1	BOOKB	59	1	507
546	SUCCINIC ACID QV2VQ C 4 H 6 04										
		1	1	99	1	3.50E-07/01	118.1	FOTEA	55	9	23
547	SUCROSE T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O* C12 H22 O11										
		1	1	02	3	1.00E-02/09	342.2	BOOKB	59	1	507
548	SUCROSE T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O* C12 H22 O11										
		2	1	02	3	1.70E-01/09	342.2	BOOKB	59	1	507
549	SUCROSE T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O* C12 H22 O11										
		1	1	02	3	1.28E+00/10	342.3	BOOKE	65		109
550	SUCROSE T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O* C12 H22 O11										
		2	1	02	1	1.28E-02/09	342.3	FOREA	37	2	207
551	SUCROSE T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O* C12 H22 O11										
		1	1	02	3	1.60E-02/09	342.3	FOREA	43	8	179
552	SUCROSE T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O* C12 H22 O11										
		1	1	02	3	3.10E-01/10	342.3	FOTEA	55	9	23

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
553	SUCROSE T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ O* C12 H22 O11	2	1	02	3	1.20E-02/09	342.3	AJCNA	59	1	280
554	SULFURIC ACID WSQQ H2 O4 S 1600	1	1	02	3	1.00E-03/14	098.1	BOOKB	59	1	507
555	SULFURIC ACID WSQQ H2 O4 S 1600	1	1	99	1	1.50E+00/01	098.1	FOTEA	55	9	23
556	SULFUROUS ACID Q5QO H2 O3 S 1702	1	1	99	1	1.10E-07/01	064.1	FOTEA	55	9	23
557	COCAINE T56 A ANTJ A FVO1 GVCR C17 H21 N O4	1	1	02	3	1.50E-01/15	303.3	BOOKE	65		106
558	COLCHICINE L B677 MV&T&J CO1 OO1 EO1 JMV1 NO1 C22 H25 N O6	1	1	02	3	4.50E-03/15	399.4	BOOKE	65		106
559	COUMARIN T66 8OVJ C 9 H 6 O2	1	2	01	3	2.00E-05/04	146.1	BOOKE	65		186
560	DIGALLIC ACID QVR CQ OQ EOVR CQ OQ EQ C14 H10 O9	1	1	02	3	2.00E-06/10	332.2	FOTEA	55	9	23

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
561	ESCULIN T66 BOVJ IQ HO- BT6OTJ CQ DQ EQ F1Q C15 H16 09										
		1	1	02	3	3.20E-01/10	340.2	BOOKE	65		109
562	ETHANETHIOL SH2 C 2 H 6 S										
		1	2	01	1	6.60E-07/11	062.1	PAPER	30	BMTP	480
563	FRUCTOSE T5OTJ BQ B1Q CQ OQ E1Q C 6 H12 06										
		1	1	02	3	2.00E-02/09	180.1	FOREA	43	8	179
564	GLUCOSE T6OTJ BQ CQ DQ EQ F1Q C 6 H12 06										
		1	1	02	3	8.COE-02/09	180.1	BOOKB	59	1	507
565	GLUTAMIC ACIO QVYZ2VQ C 5 H 9 N 04										
		2	1	02	1	1.23E-03/09	147.1	FOREA	41	6	207
566	GLUTAMIC ACIO QVYZ2VQ C 5 H 9 N 04										
		2	1	02	3	8.00E-04/09	147.1	CJREA	46	24F	203
567	LITHIUM CHLORIOE .LI..G CL LI										
		1	1	02	3	2.50E-02/09	042.4	BOOKB	59	1	507
568	VALERIC ACIO QV4 C 5 H10 02										
		1	2	02	3	3.00E+00/05	102.0	REPT		TT61	

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
569	MAGNESIUM CHLORIDE •MG••G2 CL2 MG	1	1	02	3	1.50E-02/09	095.2	BOOKB	59	1	507
570	MAGNESIUM SULFATE •MG••S-O4 MG O4 S	1	1	02	3	4.60E-03/09	246.4	BOOKB	59	1	507
571	MALTOSE L6OTJ BQ CQ DQ F1Q EO- BT6OTJ CQ DQ EQ* C12 H22 O11	1	1	02	3	3.80E-02/09	360.3	FOREA	43	8	179
572	NICOTINE T6NJ C- BT5NTJ A C10 H14 N2	1	1	02	3	1.90E-05/09	162.2	BOOKB	59	1	507
573	NICOTINE T6NJ C- BT5NTJ A C10 H14 N2	1	1	02	3	3.00E-03/15	162.2	BODKE	65		106
574	HYDROGEN CHLORIDE GH CL H 1648	1	1	02	3	9.00E-04/14	036.5	BOOKB	59	1	507
575	HYDROGEN CHLORIDE GH CL H 1648	1	1	02	3	3.10E-04/10	036.5	BODKE	65		109
576	1-BUTANOL Q4 C 4 H10 O	1	1	02	4	5.00E-01/01	074.1	JAFCA	67	15	29

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
577	1-HEXANOL Q6 C 6 H14 O	1	2	02	4	5.0CE-01/01	102.7	JAFCA	67	15	29
578	ETHYL ALCOHOL Q2 C 2 H 6 O	1	2	02	4	1.00E+02/01	046.0	JAFCA	67	15	29
579	1-PROPANOL Q3 C 3 H 8 O	1	2	02	4	9.00E+00/01	060.0	JAFCA	67	15	29
580	ETHYL VALERATE 4V02 C 7 H14 02	1	2	02	4	5.00E+00/06	130.1	JAFCA	67	15	29
581	HEXYL ACETATE 6OV1 C 8 H16 02	1	2	02	4	2.00E+00/06	144.2	JAFCA	67	15	29
582	ETHYL BUTYRATE 3V02 C 6 H12 02	1	2	02	4	1.00E+00/06	116.1	JAFCA	67	15	29
583	BUTYL PROPIONATE 4OV2 C 7 H14 02	1	2	02	4	2.50E+01/06	130.1	JAFCA	67	15	29
584	PROPYL BUTYRATE 3V03 C 7 H14 02	1	2	02	4	1.80E+01/06	130.1	JAFCA	67	15	29

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
585	2-METHYLBUTYL ACETATE 2Y1OV1 C 7 H14 O2										
		1	2	02	4	5.00E+00/06	130.2	JAFCA	67	15	29
586	BUTYL ACETATE 4OV1 C 6 H12 O2										
		1	2	02	4	6.60E+01/06	116.1	JAFCA	67	15	29
587	PROPYL PROPIONATE 3OV2 C 6 H12 O2										
		1	2	02	4	5.70E+01/06	116.1	JAFCA	67	15	29
588	ACETALDEHYDE VH1 C 2 H 4 O										
		1	1	02	1	1.50E-08/01	124.6	FOTEA	55	9	23
589	ACETALDEHYDE VH1 C 2 H 4 O										
		1	2	02	4	1.50E+01/06	044.0	JAFCA	67	15	29
590	HEXANAL VH5 C 6 H12 O										
		1	2	02	4	5.00E+00/06	100.2	JAFCA	67	15	29
591	ETHYL HEPTANOATE 6VO2 C 9 H18 O2										
		1	1	02	3	1.70E-01/01	158.0	JFDSA	68	33	213
592	DIMETHYL DISULFIDE 1SS1 C 2 H 6 S2										
		1	2	02	3	1.20E-03/01	094.1	JFDSA	68	33	213

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
593	2,6-DIMETHOXYPHENOL 1OR 8Q C01 C 8 H10 03	1	2	02	3	1.85E+00/01	154.1	JFDSA	66	31	1005
594	2,6-DIMETHOXYPHENOL 1OR 8Q C01 C 8 H10 03	1	2	05	3	3.40E-01/01	154.1	JFDSA	66	31	1005
595	2,6-DIMETHOXYPHENOL 1OR 8Q C01 C 8 H10 03	1	1	02	3	1.65E+00/01	154.1	JFDSA	66	31	1005
596	ETHYLENE DICHLORIDE G2G C 2 H 4 CL2	1	2	02	3	2.90E+01/01	098.9	JFDSA	66	31	118
597	PENTYL VALERATE 5OV4 C10 H20 02	1	1	02	3	4.70E+00/01	172.2	JFDSA	68	33	213
598	VANILLIN VHR DQ C01 C 8 H 8 03	1	1	02	3	6.80E-01/01	152.1	JFDSA	68	33	213
599	O&-UNDECALACTONE T6OVTJ F6 C11 H20 02	1	1	02	3	1.50E-01/01	184.0	JFDSA	68	33	213
600	1-PHENYL-3-METHYLPENTANOL-3 QX2&2R C12 H18 O	1	2	02	3	6.40E+00/01	178.0	JFDSA	66	31	118

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
601	G&-OCTALACTONE T5OVTJ E4 C 8 H14 02										
		1	1	02	3	4.00E-01/01	142.0	JFOSA	68	33	213
602	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	99	3	5.00E+00/01	217.0	JFDSA	67	32	75
603	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	02	3	1.00E+00/01	217.0	JFOSA	67	32	75
604	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	02	3	1.00E+00/01	217.0	JFOSA	67	32	75
605	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	99	3	6.00E+00/01	217.0	JFOSA	67	32	75
606	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	99	3	5.00E+00/01	217.0	JFOSA	67	32	75
607	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	99	3	6.00E+00/01	217.0	JFOSA	67	32	75
608	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	99	3	5.00E+00/01	217.0	JFDSA	67	32	75

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
609	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	99	3	4.5CE+00/01	217.0	JFOSA	67	32	75
610	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	02	3	1.00E+00/01	217.0	JFOSA	67	32	75
611	NOOTKATONE L66 CV AUTJ E F HYU1 C15 H21 O										
		3	1	99	3	5.50E+00/01	217.0	JFOSA	67	32	75
612	EXALTONE L-15-VTJ C15 H28 O										
		3	2	99	3	1.00E-03/01	224.0	JFOSA	66	31	268
613	METHYL IONONE EXTRA C14 H22 O										
		1	1	02	3	2.40E-03/01	306.0	JFOSA	68	33	213
614	PENTHIONINE T7SSS ESSTJ C 2 H 4 S5										
		1	2	02	3	4.00E-01/01	284.5	JFOSA	67	32	559
615	PENTHIONINE T7SSS ESSTJ C 2 H 4 S5										
		3	2	99	3	1.25E+01/01	284.5	JFOSA	67	32	559
616	HEXANOIC ACID QV5 C 6 H12 O2										
		1	2	02	3	3.00E+00/05	116.0	REPT		TT61	

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
617	HEPTANOIC ACID QV6 C 7 H14 O2										
		1	2	02	3	3.00E+00/05	116.0	REPT		TT61	
618	D&-DODECALACTONE T6OVTJ F7 C12 H22 O2										
		1	1	99	4	9.50E+01/01	198.0	JFDSA	69	34	265
619	OCTANOIC ACID QV7 C 8 H16 O2										
		1	2	02	3	3.00E+00/05	144.0	REPT		TT61	
620	BENZALDEHYDE VHR C 7 H 6 O										
		1	2	01	4	4.20E-02/01	106.1	PAPER	30	BMTP	480
621	NONANOIC ACIO QV8 C 9 H18 O2										
		1	2	02	3	3.00E+00/05	156.0	REPT		TT61	
622	G&-OECALACTONE T5OVTJ E6 C10 H18 O2										
		1	1	99	4	1.00E+00/01	170.0	JFOSA	69	34	265
623	ETHYL BUTYRATE 3VO2 C 6 H12 O2										
		1	1	03	4	1.60E-02/01	116.2	JFOSA	69	34	265
624	ACROLEIN VH1U1 C 3 H 4 O										
		2	2	02	4	1.10E+02/06	056.0	JSFAA	63	14	761

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
625	OECANOIC ACIO QV9 C10 H20 O2										
		1	2	02	9	1.00E+01/05	172.0	REPT		TT61	
626	UNDECANOIC ACIO QV10 C11 H22 O2										
		1	2	02	9	1.00E+01/05	186.0	REPT		TT61	
627	DIACETYL 1VV1 C 4 H 6 O2										
		1	1	99	4	3.20E-02/01	086.1	JFDSA	69	34	265
628	LAURIC ACID QV11 C12 H24 O2										
		1	2	02	9	1.00E+01/05	200.0	REPT		TT61	
629	TRIOECANOIC ACIO QV12 C13 H26 O2										
		1	2	02	9	1.00E+01/05	214.0	REPT		TT61	
630	MYRISTIC ACIO QV13 C14 H28 O2										
		1	2	02	9	1.00E+01/05	228.0	REPT		TT61	
631	DIACETYL 1VV1 C 4 H 6 O2										
		1	1	03	4	1.40E-02/01	086.1	JFDSA	69	34	265
632	PENTADECANOIC ACID QV14 C15 H30 O2										
		1	2	02	9	1.00E+01/05	242.0	REPT		TT61	

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
633	HEPTADECANOIC ACID QV16 C17 H34 O2										
		1	2	02	9	2.00E+01/05	270.0	REPT		TT61	
634	ETHYL ACETATE 2OV1 C 4 H 8 O2										
		1	1	02	4	6.60E+00/01	088.1	JFDSA	69	34	265
635	DIACETYL 1VV1 C 4 H 6 O2										
		1	1	02	4	5.40E-03/01	086.1	JFDSA	69	34	265
636	ETHYL OCTANOATE 7VO2 C10 H20 O2										
		1	1	02	4	1.50E-02/01	116.2	JFDSA	69	34	265
637	ETHYL ACETATE 2OV1 C 4 H 8 O2										
		1	1	02	3	3.00E+00/01	088.1	JFDSA	68	33	213
638	BENZYL ALCOHOL Q1R C 7 H 8 O										
		1	1	02	3	5.50E+00/01	108.1	JFDSA	68	33	213
639	FORMIC ACID VHQ C H 2 O2										
		1	2	02	2	1.50E+03/01	046.0	JFDSA	66	31	118
640	15-HYDROXYPENTADECANOLACTONE T-18-OVTJ C15 H28 O3										
		1	2	02	3	7.00E-04/01	257.0	JFDSA	66	31	118

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CCDE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
641	CINEOLE-1,8 T66 A B ACTJ B B F C10 H18 O										
		1	2	02	3	1.20E-02/01	154.0	JFDSA	66	31	118
642	GUAIACOL QR B01 C 7 H 8 02										
		1	1	02	3	1.30E+01/06	124.1	JFDSA	66	31	1005
643	GUAIACCL QR B01 C 7 H 8 02										
		1	2	05	3	7.00E-02/01	124.1	JFDSA	66	31	1005
644	GUAIACOL QR B01 C 7 H 8 02										
		1	2	02	3	2.10E+01/06	124.1	JFDSA	66	31	1005
645	SAFROLE T56 BO DO CHJ G2U1 C10 H10 02										
		2	2	99	4	2.20E-01/01	162.1	JFDSA	66	31	268
646	ETHYL OCTANOATE 7V02 C10 H20 02										
		1	1	02	3	7.20E-01/01	172.2	JFDSA	68	33	213
647	DL-MENTHONE L6VTJ BY E C10 H18 O										
		1	2	02	3	1.70E-01/01	154.2	JFDSA	66	31	118
648	2-HEPTANONE 5V1 C 7 H14 O										
		1	2	01	3	8.97E-04/04	114.1	JFDSA	62	27	197

Coding Key

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
649	CREOSOL QR D B01 C 8 H10 02	1	1	02	3	6.50E+01/06	138.0	JFDSA	66	31	1005
650	METHYL SALICYLATE QR BV01 C 8 H 8 03	2	2	99	4	1.40E-01/01	152.1	JFDSA	66	31	268
651	CITRAL VH1UY&3UY C10 H16 O	2	2	99	3	6.00E-02/01	152.2	JFDSA	66	31	268
652	G&-NONALACTONE T5OVTJ E5 C 9 H16 02	2	2	99	3	1.00E-02/01	174.2	JFDSA	66	31	268
653	P@-PROPENYLANISOLE 2U1R D01 C10 H12 O	2	2	99	4	1.50E-01/01	148.2	JFDSA	66	31	268
654	2-HEPTANONE 5V1 C 7 H14 O	1	1	99	4	1.50E+01/01	114.2	JFDSA	69	34	265
655	2-ETHYLHEXANOL-1 Q1Y4&2 C 8 H18 O	1	2	02	3	2.70E+02/01	130.2	JWPFA	63	35	777
656	4-HEPTANOL QY3&3 C 7 H16 O	1	2	02	3	1.30E+03/01	144.2	JWPFA	63	35	777

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
657	2,2*-DICHLOROISOPROPYL ETHER G1Y&OY1G C 6 H12 CL2 O	1	2	02	3	2.00E+02/01	171.0	JWPFA	63	35	777
658	2,2*-DICHLOROETHYL ETHER G2O2G C 4 H 8 CL2 O	1	2	02	3	3.60E+02/01	108.5	JWPFA	63	35	777
659	TETRALIN L66&TJ C10 H12	1	2	02	3	1.80E+01/01	132.2	JWPFA	63	35	777
660	A&-METHYLBENZYL ALCOHOL QYR C 8 H10 O	1	2	02	3	1.45E+03/01	122.1	JWPFA	63	35	777
661	2-METHYL-5-ETHYLPYRIDINE T6NJ B E2 C 8 H11 N	1	2	02	3	1.90E+01/01	121.1	JWPFA	63	35	777
662	NAPHTHALENE L66J C10 H 8	1	2	02	3	6.80E+00/01	128.1	JWPFA	63	35	777
663	ACETOPHENONE 1VR C 8 H 8 O	1	2	02	3	6.50E+01/01	120.1	JWPFA	63	35	777
664	STYRENE 1U1R C 8 H 8	1	2	02	3	3.70E+01/01	104.1	JWPFA	63	35	777

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
665	ETHYLBENZENE 2R C 8 H10	1	2	02	3	1.40E+02/01	106.1	JWPFA	63	35	777
666	ACETALDEHYDE VH1 C 2 H 4 O	2	2	01	1	2.10E-01/01	044.0	JPCAA	69	19	91
667	ACETIC ACID QV1 C 2 H 4 O2	2	2	01	1	1.00E+00/01	060.0	JPCAA	69	19	91
668	2-DECANONE 8V1 C10 H20 O	1	1	02	4	1.90E-01/01	156.3	JFDSA	69	34	265
669	ACETONE 1V1 C 3 H 6 O	2	2	01	1	1.00E+02/01	058.0	JPCAA	69	19	91
670	ACROLEIN VH1U1 C 3 H 4 O	2	2	01	1	2.10E-01/01	056.0	JPCAA	69	19	91
671	ACRYLONITRILE NC1U1 C 3 H 3 N	2	2	01	1	2.14E+01/01	053.0	JPCAA	69	19	91
672	3-CHLOROPROPENE G2U1 C 3 H 5 CL	2	2	01	1	4.70E-01/01	075.5	JPCAA	69	19	91

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
673	OIMETHYLAMINE 1M1 C 2 H 7 N										
		2	2	01	1	4.70E-02/01	045.0	JPCAA	69	19	91
674	METHYLAMINE Z1 C H 5 N										
		2	2	01	1	2.10E-02/01	031.0	JPCAA	69	19	91
675	TRIMETHYLAMINE 1N1&1 C 3 H 9 N										
		2	2	01	1	2.10E-04/01	059.1	JPCAA	69	19	91
676	AMMONIA ZH H3 N 1774										
		2	2	01	1	4.68E+01/01	017.0	JPCAA	69	19	91
677	ANILINE ZR C 6 H 7 N										
		2	2	01	1	1.00E+00/01	093.1	JPCAA	69	19	91
678	BENZENE R C 6 H 6										
		2	2	01	1	4.68E+00/01	078.1	JPCAA	69	19	91
679	BENZYL CHLORIDE G1R C 7 H 7 CL										
		2	2	01	1	4.70E-02/01	126.5	JPCAA	69	19	91
680	BENZYL SULFIDE R1S1R C14 H14 S										
		1	2	01	3	6.00E-03/01	214.3	PAPER	30	BMTP	480

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
681	8ROMINE EE 8R2 1826										
		2	2	01	1	4.70E-02/01	159.8	JPCAA	69	19	91
682	8UTYRIC ACIO QV3 C 4 H 8 02										
		2	2	01	1	1.00E-03/01	088.1	JPCAA	69	19	91
683	CAR8ON DISULFIDE SCS C S2										
		2	2	01	1	2.10E-01/01	076.1	JPCAA	6	19	91
684	CAR8ON TETRACHLORIOE GXGGG C CL4										
		2	2	01	1	2.14E+01/01	153.8	JPCAA	6	19	91
685	CAR8ON TETRACHLORIDE GXGGG C CL4										
		2	2	01	1	2.14E+01/01	153.8	JPCAA	69	19	91
686	CAR8ON TETRACHLORIOE GXGGG C CL4										
		1	2	01	3	4.53E+00/04	153.8	IECHA	19	11	336
687	CHLORINE GG CL2 1774										
		2	2	01	1	3.14E-01/01	070.9	JPCAA	69	19	91
688	N,N-DIMETHYLACETAMIOE 1VN1&1 C 4 H 9 N O										
		2	2	01	1	4.68E+01/01	087.1	JPCAA	69	19	91

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
689	FORMAMIDE ZVH C H 3 N O	2	2	01	1	1.00E+02/01	073.1	JPCAA	69	19	91
690	2-OCTANONE 6V1 C 8 H16 O	1	1	02	4	1.50E-01/01	128.2	JFDSA	69	34	265
691	PHENYL ETHER ROR C12 H10 O	2	2	01	1	1.00E-01/01	170.2	JPCAA	69	19	91
692	PHENYL SULFIDE RSR C12 H10 S	2	2	01	1	4.70E-03/01	156.2	JPCAA	69	19	91
693	ETHYL ACRYLATE 2OV1U1 C 5 H 8 O2	2	2	01	1	4.70E-04/01	100.1	JPCAA	69	19	91
694	D&-DECALACTONE T6OVTJ F5 C10 H18 O2	1	1	02	4	1.40E-01/01	170.3	JFDSA	69	34	265
695	ETHANETHIOL SH2 C 2 H 6 S	2	2	01	1	1.00E-03/01	062.1	JPCAA	69	19	91
696	FORMALDEHYDE VHH C H 2 O	1	2	02	3	2.50E+01/01	030.0	PERCO	56	MIDD	

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
697	HYDROGEN CHLORIDE GH CL H 1648										
		2	2	01	1	1.00E+01/01	036.4	JPCAA	69	19	91
698	HYDROGEN SULFIDE SHH H2 S 1777										
		2	2	01	1	4.70E-03/01	034.0	JPCAA	69	19	91
699	ACETIC ACID QV1 C 2 H 4 02										
		1	1	02	4	2.20E+01/01	060.1	JFDSA	69	34	265
700	METHANOL Q1 C H 4 C										
		2	2	01	1	1.00E+02/01	032.0	JPCAA	69	19	91
701	METHYL CHLORIDE G1 C H 3 CL										
		2	2	01	1	1.00E+01/01	050.4	JPCAA	69	19	91
702	METHYLENE CHLORIDE G1G C H 2 CL2										
		2	2	01	1	2.14E+02/01	084.9	JPCAA	69	19	91
703	METHYL ETHYL KETONE 2V1 C 4 H 8 O										
		2	2	01	1	1.00E+01/01	072.1	JPCAA	69	19	91
704	4-METHYLPENTANONE-2 1V1Y C 6 H12 O										
		2	2	01	1	4.70E-01/01	100.0	PERCO	56	MIDD	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
705	METHANETHIOL SH1 C H 4 S										
		2	2	01	1	2.10E-03/01	048.1	JPCAA	69	19	91
706	BUTYRIC ACID QV3 C 4 H 8 02										
		1	1	02	4	6.20E+00/01	088.1	JFDSA	69	34	265
707	CHLOROBENZENE GR C 6 H 5 CL										
		2	2	01	1	2.10E-01/01	112.5	JPCAA	69	19	91
708	NITROBENZENE WNR C 6 H 5 N 02										
		2	2	01	1	4.70E-03/01	123.1	JPCAA	69	19	91
709	OCTANOIC ACID QV7 C 8 H16 02										
		1	1	02	3	5.80E+00/01	144.2	JFOSA	64	29	679
710	HEXANOIC ACID QV5 C 6 H12 02										
		1	1	02	3	5.40E+00/01	116.0	JFOSA	64	29	679
711	HEXANOIC ACID QV5 C 6 H12 02										
		1	1	02	4	1.50E+01/01	116.2	JFOSA	69	34	265
712	PHENOL QR C 6 H 6 O										
		2	2	01	1	4.70E-02/01	094.1	JPCAA	69	19	91

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
713	PHOSGENE GVG C CL2 D	2	2	01	1	1.00E+00/01	098.9	JPCAA	69	19	91
714	PHOSPHINE PHHH H3 P 1812	2	2	01	1	2.10E-02/01	034.0	JPCAA	69	19	91
715	PYRIDINE T6NJ C 5 H 5 N	2	2	01	1	2.10E-02/01	079.1	JPCAA	69	19	91
716	STYRENE 1U1R C 8 H 8	2	2	01	1	1.00E-01/01	104.1	JPCAA	69	19	91
717	STYRENE 1U1R C 8 H 8	2	2	01	1	4.70E-02/01	104.1	JPCAA	69	19	91
718	SULFUR DICHLORIDE GSG CL2 S 1825	2	2	01	1	1.00E-03/01	102.9	JPCAA	69	19	91
719	SULFUR DIOXIDE OSO O2 S 1775	2	2	01	1	4.70E-01/01	064.0	JPCAA	69	19	91
720	TOLUENE 1R C 7 H 8	2	2	01	1	4.68E+00/01	092.1	JPCAA	69	19	91

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
721	TOLUENE 1R C 7 H 8										
		2	2	01	1	2.14E+00/01	092.1	JPCAA	69	19	91
722	P@-TOLYL ISOCYANATE OCNR D C 8 H 7 N O										
		2	2	01	1	2.14E+00/01	133.1	JPCAA	69	19	91
723	TRICHLOROETHYLENE GYGU1G C 2 H CL3										
		2	2	01	1	2.14E+01/01	131.4	JPCAA	69	19	91
724	DECANOIC ACID QV9 C10 H20 02										
		1	1	02	3	3.50E+00/01	172.3	JFDSA	64	29	679
725	METHYL SULFIDE 1S1 C 2 H 6 S										
		2	2	01	1	1.00E-03/01	062.1	JPCAA	69	19	91
726	LAURALDEHYDE VH11 C12 H24 O										
		1	1	02	4	1.10E-02/01	186.3	JFDSA	69	34	265
727	1-HEPTANOL Q7 C 7 H16 O										
		1	1	02	4	2.40E+00/01	116.2	JFDSA	69	34	265
728	PHENYL SULFIDE RSR C12 H10 S										
		2	2	01	1	2.10E-03/01	214.3	JPCAA	69	19	91

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
729	METHYL SULFIDE 1S1 C 2 H 6 S	1	1	03	4	9.00E-03/01	062.1	JOSCA	69	52	1198
730	DIACETYL 1VV1 C 4 H 6 O2	1	1	03	4	2.90E-02/01	086.1	JDSCA	69	52	1198
731	HEXANAL VH5 C 6 H12 O	1	1	02	4	1.60E-02/01	102.2	JFDSA	69	34	265
732	1-HEPTANOL Q7 C 7 H16 O	1	1	02	4	3.10E-02/01	114.0	JFDSA	69	34	265
733	VALERALDEHYDE VH4 C 5 H10 O	1	1	02	4	7.00E-01/01	086.1	JFDSA	69	34	265
734	CHLORAL VHXGGG C 2 H CL3 O	2	2	01	1	4.70E-02/01	147.4	JPCAA	69	19	91
735	NONANAL VH8 C 9 H18 O	1	1	05	3	1.00E+00/01	142.0	NOFRA	62	3	118
736	ACROLEIN VH1U1 C 3 H 4 O	1	2	01	1	1.80E+00/01	056.0	PAPER	30	BMTP	480

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
737	OCTANAL VH7 C 8 H16 O										
		1	1	05	3	9.00E-01/01	128.0	CHINA	58	00	1289
738	HEXANAL VH5 C 6 H12 O										
		1	1	05	3	3.00E-01/01	100.0	CHINA	58	00	1289
739	FORMALDEHYDE VHH C H 2 O										
		2	2	01	1	1.00E+00/01	030.0	JPCAA	69	19	91
740	P@-CRESOL QR D C 7 H 8 O										
		2	2	01	1	1.00E-03/01	108.1	JPCAA	69	19	91
741	HEPTANAL VH6 C 7 H14 O										
		1	1	99	4	7.50E-01/01	114.0	JFDSA	69	34	265
742	METHYL ANTHRANILATE ZR BVO1 C 8 H 9 N O2										
		1	2	01	3	9.40E-03/01	151.1	PAPER	30	BMTP	480
743	ACETIC ACID QV1 C 2 H 4 O2										
		1	1	99	4	7.00E+00/01	060.0	JFOSA	69	34	265
744	ALLYL ALCOHOL Q2U1 C 3 H 6 O										
		1	2	01	3	1.4CE+00/01	058.0	PAPER	30	8MTP	480

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
745	1-PENTENE 4U1 C 5 H10										
		1	2	01	3	1.90E-01/01	070.1	PAPER	30	BMTP	480
746	D&-TETRADECALACTONE T6OVTJ F9 C14 H26 O2										
		1	1	99	4	5.00E+02/01	226.0	JFDSA	69	34	265
747	VALERALDEHYDE VH4 C 5 H10 O										
		1	1	99	4	3.00E-01/01	086.1	JFDSA	69	34	265
748	ETHYL ALCOHOL Q2 C 2 H 6 O										
		2	2	01	1	1.00E+01/01	046.0	JPCAA	69	19	91
749	METHYL METHACRYLATE 1UYVO1 C 5 H 8 O2										
		2	2	01	1	2.10E-01/01	100.1	JPCAA	69	19	91
750	HEXANAL VH5 C 6 H12 O										
		1	1	99	4	1.90E-01/01	100.0	JPCAA	69	19	91
751	G&-HEPTALACTONE T5OVTJ E3 C 7 H12 O2										
		1	1	99	4	3.40E+00/01	128.0	JFDSA	69	34	265
752	G&-OCTALACTONE T5OVTJ E4 C 8 H14 O2										
		1	1	99	4	3.40E+00/01	142.0	JFDSA	69	34	265

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
753	G&-NONALACTONE T5OVTJ E5 C 9 H16 O2										
		1	1	99	4	2.40E+00/01	156.0	JFDSA	69	34	265
754	2-BUTENE 2U2 C 4 H 8										
		1	2	01	4	2.10E+00/01	056.1	PAPER	30	BMTP	480
755	TETRACHLOROETHYLENE GYGUYGG C 2 CL4										
		2	2	01	1	4.68E+00/01	165.8	JPCAA	69	19	91
756	G&-HEXALACTONE T5OVTJ E2 C 6 H10 O2										
		1	2	99	4	8.00E+00/01	114.0	JFDSA	69	34	265
757	D&-OCTALACTONE T6OVTJ F3 C 8 H14 O2										
		1	2	99	4	3.00E+00/01	142.0	JFDSA	69	34	265
758	G&-UNDECALACTONE T5OVTJ E7 C11 H20 O2										
		1	2	99	4	9.50E-01/01	184.0	JFDSA	69	34	265
759	NITROBENZENE WNR C 6 H 5 N O2										
		1	2	01	1	1.90E+00/01	123.1	PAPER	30	BMTP	480
760	ETHYL BUTYRATE 3VO2 C 6 H12 O2										
		1	1	99	4	6.00E-01/01	116.0	JFDSA	69	34	265

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
761	ETHYL ACETATE 2OV1 C 4 H 8 O2										
		1	1	99	4	2.20E+01/01	088.0	JFDSA	69	34	265
762	1-BUTENE 3U1 C 4 H 8										
		1	2	01	4	1.30E+00/01	056.1	PAPER	30	BMTP	480
763	DIACETYL 1VV1 C 4 H 6 O2										
		1	1	99	4	5.50E-02/01	086.0	JFDSA	69	34	265
764	P@-XYLENE 1R 0 C 8 H10										
		2	2	01	1	4.70E-01/01	106.1	JPCAA	69	19	91
765	ETHYL HEXANOATE 5VO2 C 8 H16 O2										
		1	1	99	4	8.50E-01/01	144.2	JFDSA	69	34	265
766	1-OCTENOL-3 QY5&1U1 C 8 H16 O										
		1	1	04	3	1.00E+00/06	128.0	JORSA	64	31	253
767	MYRCENE 1Y&U3YU1&1U1 C10 H16										
		1	2	02	3	1.30E+01/06	136.2	JSFAA	68	E 16	1009
768	METHYL SALICYLATE QR BVO1 C 8 H 8 O3										
		1	2	99	3	1.00E-05/09	152.1	ANYAA	64	116	567

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
769	METHYL SALICYLATE QR BVO1 C 8 H 8 O3										
		1	2	99	3	1.00E-04/09	152.1	ANYAA	64	116	567
770	LINALOOL 1Y&U3YU1&1U1 C10 H18 O										
		1	2	02	3	6.00E+00/06	154.2	JSFAA	66	17	142
771	ISOVALERALDEHYDE VH1Y C 5 H10 O										
		1	2	02	3	2.30E-05/17	160.9	JFDSA	62	27	165
772	HEXANOIC ACID QV5 C 6 H12 O2										
		1	1	03	3	1.40E+01/01	116.1	FOREA	57	22	316
773	2-HEPTANONE 5V1 C 7 H14 O										
		1	2	01	3	8.97E-04/11	114.1	JFDSA	62	27	197
774	2-HEPTENAL VH1U5 C 7 H12 O6										
		1	2	02	3	1.30E+01/06	114.2	JSFAA	63	14	761
7	2-HEXENAL VH1U4 C 6 H10 O										
		1	2	02	3	1.70E-02/01	258.3	JAFCA	67	15	29
776	4T-HEPTENAL VH2U4 -T C 7 H12 O										
		1	2	05	3	2.30E+00/18	114.2	JAOCA	68	45	468

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
777	4C-HEPTENAL VH2U4 -C C 7 H12 O										
		1	2	05	3	1.00E-02/18	114.2	JAOCA	68	45	468
778	1-PROPANETHIOL SH3 C 3 H 8 S										
		1	2	01	3	1.60E-03/01	076.1	PAPER	30	BMTP	480
779	2T,4C-HEPTADIENAL VH1U2U3 -CT C 7 H10 O										
		1	2	05	3	3.60E+00/01	110.2	JAOCA	64	41	326
780	1-BUTANETHIOL SH4 C 4 H10 S										
		1	2	01	1	1.40E-03/11	090.1	PAPER	30	BMTP	480
781	ISOBUTYL MERCAPTAN SH1Y C 4 H10 S										
		1	2	01	3	8.00E-03/11	090.1	IECHA	19	11	336
782	2T,4T-HEPTADIENAL VH1U2U3 -TT C 7 H10 O										
		1	2	05	3	1.00E+01/01	110.2	JAOCA	64	41	326
783	2T-HEPTENAL VH1U5 -T C 7 H12 O										
		1	2	05	3	1.40E+01/01	114.2	JAOCA	64	41	326
784	2T-HEXENAL VH1U4 -T C 6 H10 O										
		1	2	05	3	1.00E+01/01	116.2	JAOCA	64	41	326

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
785	2T,4T-HEXADIENAL VH1U2U2 -T C 6 H 8 O										
		1	2	05	3	2.70E-01/01	100.2	JAOCA	64	41	326
786	3C-HEXENAL VH2U3 -C C 6 H10 O										
		1	2	05	3	1.10E-01/01	100.2	JAOCA	64	41	326
787	3T-HEXENAL VH2U3 -T C 6 H10 O										
		1	2	05	3	1.20E+00/01	258.3	JAOCA	64	41	326
788	HEPTANAL VH6 C 7 H14 O										
		1	2	02	3	3.00E+00/06	114.2	JAFCA	68	16	1009
789	1-HEXANOL Q6 C 6 H14 O										
		1	2	01	3	5.30E-13/19	102.2	ANYAA	55	62	246
790	ETHYL 2-METHYLBUTYRATE 2YV02 C 7 H14 O2										
		1	2	02	3	1.60E-04/01	130.2	JAFCA	67	15	29
791	ETHYL ALCOHOL Q2 C 2 H 6 O										
		1	2	02	3	1.00E+02/01	046.1	JAFCA	67	15	29
792	DIACETYL 1VV1 C 4 H 6 O2										
		1	1	99	3	1.00E-02/01	086.1	JFDSA	65	30	35

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
793	DIACETYL 1VV1 C 4 H 6 O2										
		1	1	04	3	2.00E-01/01	086.1	JFOSA	65	30	35
794	DECANAL VH9 C10 H20 O										
		1	2	05	3	6.70E+00/01	156.3	JAOCA	64	41	326
795	2-METHOXY-3-1SOBUTYLPYRAZINE T6N DNJ BO1 C1Y C 9 H14 N2 O										
		1	2	02	4	2.00E+00/06	166.1	CHINA	69	00	490
796	CUMENE 1YR C 9 H12										
		2	2	01	2	1.2CE+00/01	120.0	PERCO		TURK	
797	VANILLA EXTRACT C										
		1	2	02	2	2.00E+02/01	.	FOTEA	52	6	372
798	VANILLA EXTRACT C										
		2	2	02	2	1.00E+03/01	.	FOTEA	52	6	372
799	VANILLA EXTRACT C										
		2	1	02	2	1.00E+03/01	.	FOTEA	52	6	372
800	VANILLIN VHR DQ CO1 C 8 H 8 O3										
		1	2	02	2	2.00E-01/01	152.1	FOTEA	52	6	372

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
801	VANILLIN VHR OQ CO1 C 8 H 8 O3										
		2	2	02	2	4.00E+00/01	152.1	FOTEA	52	6	372
802	VANILLIN VHR OQ CO1 C 8 H 8 O3										
		2	1	02	2	4.00E+00/01	152.1	FOTEA	52	6	372
803	ETHYL VANILLIN VHR OQ CO2 C 9 H10 O3										
		1	2	02	2	1.00E-01/01	166.0	FOTEA	52	6	372
804	ETHYL VANILLIN VHR OQ CO2 C 9 H10 O3										
		2	2	02	2	2.00E+00/01	166.0	FOTEA	52	6	372
805	ETHYL VANILLIN VHR OQ CO2 C 9 H10 O3										
		2	1	02	2	2.00E+00/01	166.0	FOTEA	52	6	372
806	COUMARIN T66 BOVJ C 9 H 6 O2										
		1	1	99	2	5.00E-02/01	146.0	FOTEA	52	6	372
807	COUMARIN T66 BOVJ C 9 H 6 O2										
		2	1	02	2	8.00E-01/01	146.0	FOTEA	52	6	372
808	COUMARIN T66 BOVJ C 9 H 6 O2										
		2	1	02	2	2.50E-01/01	146.0	FOTEA	52	6	372

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
809	PROPENYL GUAIETHOL 2U1R CQ DO2 C11 H14 O										
		2	2	02	2	1.00E-02/01	178.0	FOTEA	52	6	372
810	PROPENYL GUAIETHOL 2U1R CQ DO2 C11 H14 O										
		2	2	02	2	1.60E-01/01	178.0	FOTEA	52	6	372
811	PROPENYL GUAIETHOL 2U1R CQ DO2 C11 H14 O										
		2	2	02	2	4.00E-01/01	178.0	FOTEA	52	6	372
812	1-OCTENOL-3 QY5&1U1 C 8 H16 O										
		1	1	99	3	1.00E+01/01	128.0	JDRSA	64	31	253
813	1-BUTANOL Q4 C 4 H10 O										
		1	2	01	3	2.86E-09/09	074.1	BOOKE	65		187
814	SACCHARIN T56 BSWMVJ C 7 H 5 N O3 S										
		1	1	02	3	1.25E-03/20	183.1	BOOKE	65		109
815	SODIUM SACCHARIN T56 BSWNVJ &-NA- C 7 H 4 N NA O3 S										
		1	1	02	3	2.30E-05/09	241.1	BOOKB	59	1	507
816	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	1	02	3	2.00E-03/14	088.1	BOOKB	59	1	507

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
817	PHENYLTHIOUREA SUYZMR C 7 H 8 N2 S	1	1	02	3	2.00E-05/09	152.1	BOOKB	59	1	507
818	UNDECANAL VH10 C11 H22 O	2	2	02	4	5.00E+00/06	170.3	JSFAA	63	14	761
819	LAURALDEHYDE VH11 C12 H24 O	2	2	02	4	2.00E+00/06	184.3	JSFAA	63	14	761
820	ISOVALERALDEHYDE VH1Y C 5 H10 O	2	2	02	4	1.50E-01/06	086.1	JSFAA	63	14	761
821	ISOBUTYRALDEHYDE VHY C 4 H 8 O	2	2	02	4	9.00E-01/06	072.1	JSFAA	63	14	761
822	1-PROPANETHIOL SH3 C 3 H 8 S	1	2	01	3	6.00E-03/04	076.1	IECHA	19	11	336
823	2-NONENAL VH1U7 C 9 H16 O6	2	2	02	4	8.00E-02/06	140.1	JSFAA	63	14	761
824	2-HEXENAL VH1U4 C 6 H10 O	2	2	02	4	1.70E+01/06	098.0	JSFAA	63	14	761

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
825	2-HEPTENAL VH1U5 C 7 H12 O6										
		2	2	02	4	1.30E+01/06	112.0	JSFAA	63	14	761
826	CROTONALDEHYDE VH1U2 C 4 H 6 O										
		2	2	02	4	5.25E+02/06	070.0	JSFAA	63	14	761
827	ETHER 2O2 C 4 H10 O										
		1	2	01	3	5.83E+00/04	074.1	IECHA	19	11	336
828	CHLOROFORM GYGG C H CL3										
		1	2	01	3	3.30E+00/11	119.3	IECHA	19	11	336
829	PHENYL ISONITRILE CNR C 7 H 5 N										
		1	2	99	3	2.00E-03/11	119.1	IECHA	19	11	336
830	T-PENTYL ISOVALERATE 5OV1Y C10 H20 O2										
		1	2	01	3	1.20E-02/11	172.2	IECHA	19	11	336
831	PENTYL SULFIDE 5S5 C10 H22 S										
		1	2	01	3	1.00E-03/11	174.2	IECHA	19	11	336
832	ETHYL SULFIDE 2S2 C 4 H10 S										
		1	2	01	3	1.20E-02/11	090.1	IECHA	19	11	336

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
833	METHYL ISOTHIOCYANATE SCN1 C 2 H 3 N S										
		1	2	01	3	1.50E-02/11	073.1	IECHA	19	11	336
834	VALERIC ACID QV4 C 5 H10 02										
		1	2	01	3	2.90E-02/11	102.1	IECHA	19	11	336
835	1-PENTANOL Q5 C 5 H12 O										
		1	2	01	3	2.25E-01/11	088.1	IECHA	19	11	336
836	HYDROGEN CHLORIDE GH CL H 1648										
		1	1	02	3	5.00E-04/09	036.4	FOREA	43	8	179
837	GLUCOSE T6OTJ BQ CQ DQ EQ F1Q C 6 H12 06										
		1	1	02	3	4.50E-02/09	180.1	FOREA	43	8	179
838	TARTARIC ACID QVYQYQVQ C 4 H 6 06										
		1	1	02	3	4.10E-04/09	150.0	FOREA	43	8	179
839	MALIC ACID QVYQ1VQ C 4 H 6 05										
		1	1	02	3	4.30E-04/09	134.0	FOREA	43	8	179
840	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		1	1	02	3	4.20E-04/09	210.1	FOREA	43	8	179

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
841	LACTIC ACID QYVQ C 3 H 6 03										
		1	1	02	3	5.20E-04/09	090.0	FDREA	43	8	179
842	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		2	1	02	9	5.00E-05/09	210.1	AJCNA	59	7	280
843	ETHYL ACETATE 2OV1 C 4 H 8 02										
		1	2	02	4	5.00E+00/01	088.1	JAFCA	67	15	29
844	MALIC ACID QVYQ1VQ C 4 H 6 05										
		1	1	02	3	2.60E-03/10	134.0	FOREA	55	9	23
845	LACTIC ACID QYVQ C 3 H 6 03										
		1	1	02	3	3.80E-03/10	090.0	FOREA	55	9	23
846	TARTARIC ACID QVYQYQVQ C 4 H 6 06										
		1	1	02	3	2.70E-03/10	150.0	FOREA	55	9	23
847	GLUCOSE T6OTJ BQ CQ DQ EQ F1Q C 6 H12 06										
		1	1	02	3	4.40E-01/10	180.1	FOREA	55	9	23
848	SUCROSE T6OTJ B1Q CQ DQ EQ FO- 8T5OTJ 81Q CQ O* C12 H22 O11										
		2	1	02	1	2.22E-02/09	342.3	FOREA	41	6	207

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
849	TARTARIC ACID QVYQYQVQ C 4 H 6 06										
		2	1	02	1	5.24E-04/09	150.0	FOREA	41	6	207
850	2T-DODECENAL VH1U10 -T C12 H22 O										
		1	2	05	3	3.60E+01/06	126.2	JAOCA	64	41	326
851	2-DECENAL VH1U8 C10 H18 O										
		1	2	02	3	3.00E-01/06	155.3	JSFAA	68	16	1009
852	LACTIC ACID QYVQ C 3 H 6 03										
		2	1	02	1	1.60E-03/09	090.0	FOREA	37	2	207
853	FORMIC ACID VHQ C H 2 02										
		1	1	02	3	1.80E-03/14	046.0	BOOKB	59	1	507
854	HYDROXYPROLINE T5MTJ BVQ DQ C 5 H 9 N 03										
		1	1	02	3	5.00E+01/21	131.1	JAFCA	69	17	689
855	LYSINE HYDROCHLORIDE Z4YZVQ &GH C 6 H15 CL N2 O										
		1	1	02	3	5.00E+01/21	182.6	JAFCA	69	17	689
856	A&-ALANINE ZYVQ C 3 H 7 N 02										
		1	1	02	3	6.00E+01/21	089.1	JAFCA	69	17	689

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
857	GLYCINE Z1VQ C 2 H 5 N O2										
		1	1	02	3	1.30E+02/21	075.1	JAFCA	69	17	689
858	SERINE QVYZ1Q C 3 H 7 N O3										
		1	1	02	3	1.50E+02/21	105.1	JAFCA	69	17	689
859	GLUTAMINE ZV2YZVQ C 5 H10 N2 O3										
		1	1	02	3	2.50E+02/21	146.2	JAFCA	69	17	689
860	THREONINE QY&YZVQ C 4 H 9 N O3										
		1	1	02	3	2.60E+02/21	119.1	JAFCA	69	17	689
861	PROLINE T5MTJ BVQ C 5 H 9 N O2										
		1	1	02	3	3.00E+02/21	115.1	JAFCA	69	17	689
862	ASPARTIC ACID QVYZ1VQ C 4 H 7 N O4										
		1	1	02	3	3.00E+00/21	133.1	JAFCA	69	17	689
863	GLUTAMIC ACID QVYZ2VQ C 5 H 9 N O4										
		1	1	02	3	5.00E+00/21	147.1	JAFCA	69	17	689
864	HISTIDINE T5M CNJ D1YZVQ &GH C 6 H10 CL N3 O2										
		1	1	02	3	5.00E+00/21	191.6	JAFCA	69	17	689

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
865	ASPARTAMINE Z2YZVQ C 4 H10 N2 O2	1	1	02	3	1.00E+02/21	133.1	JAFCA	69	17	689
866	SODIUM GLUTAMATE QVYZ2VO &-NA- C 5 H 8 N NA O4	1	1	02	3	3.00E+01/21	169.1	JAFCA	69	17	689
867	SODIUM ASPARTATE QVYZ1VO &-NA- C 4 H 6 N NA O4	1	1	02	3	1.00E+02/21	177.0	JAFCA	69	17	689
868	HISTIDINE T5M CNJ 01YZVQ C 6 H 9 N3 O2	1	1	02	3	2.00E+01/21	155.2	JAFCA	69	17	689
869	ARGININE HYDROCHLORIDE QVYZ3MYZUM &GH C 6 H15 CL N4 O2	1	1	02	3	3.00E+01/21	210.7	JAFCA	69	17	689
870	METHIONINE QVYZ2S1 C 5 H11 N O2 S	1	1	02	3	3.00E+01/21	149.2	JAFCA	69	17	689
871	VALINE QVYZY C 5 H11 N O2	1	1	02	3	4.00E+01/21	117.2	JAFCA	69	17	689
872	ARGININE QVYZ3MYZUM C 6 H14 N4 O2	1	1	02	3	5.00E+01/21	174.2	JAFCA	69	17	689

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
873	ISOLEUCINE QVYZY2 C 6 H13 N O2										
		1	1	02	3	9.00E+01/21	131.2	JAFCA	69	17	689
874	PHENYLALANINE QVYZ1R C 9 H11 N O2										
		1	1	02	3	9.00E+01/21	165.2	JAFCA	69	17	689
875	TRYPTOPHANE T56 8MJ D1YZVQ C11 H12 N2 O2										
		1	1	02	3	9.00E+01/21	204.2	JAFCA	69	17	689
876	LEUCINE QVYZ1Y C 6 H13 N O2										
		1	1	02	3	1.90E+02/21	131.2	JAFCA	69	17	689
877	ACETALDEHYDE VH1 C 2 H 4 O										
		1	2	01	3	4.00E-03/04	068.4	PAPER	39	PHR	35
878	ACROLEIN VH1U1 C 3 H 4 O										
		1	2	01	3	3.80E-02/04	056.1	PAPER	39	PHR	35
879	*AKROL* -MIXED TERPENES										
		1	2	01	3	1.00E-02/04	.	PAPER	39	PHR	35
880	ALLYL ALCOHOL Q2U1 C 3 H 6 O										
		1	2	01	3	1.70E-02/04	058.1	PAPER	39	PHR	35

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
881	ALLYLAMINE Z2U1 C 3 H 7 N										
		1	2	01	3	6.7CE-02/04	057.1	PAPER	39	PHR	35
882	ALLYL DISULFIDE 1U2SS2U1 C 6 H10 S2										
		1	2	01	3	1.00E-04/04	080.9	PAPER	39	PHR	35
883	ALLYL ISOCYANIDE CN2U1 C 4 H 5 N										
		1	2	01	3	4.30E-03/04	067.1	PAPER	39	PHR	35
884	ALLYL ISOTHIOCYANATE SCN2U1 C 4 H 5 N S										
		1	2	01	3	1.70E-03/04	099.2	PAPER	39	PHR	35
885	ALLYL MERCAPTAN SH2U1 C 3 H 6 S										
		1	2	01	3	5.00E-05/04	074.2	PAPER	39	PHR	35
886	ALLYL SULFIDE 1U2S2U1 C 6 H10 S										
		1	2	01	3	5.00E-05/04	114.2	PAPER	39	PHR	35
887	AMMONIA ZH H3 N 1774										
		1	2	01	3	3.70E-02/04	017.1	PAPER	39	PHR	35
888	AMYLENE 2UY C 5 H10										
		1	2	01	3	6.60E-03/04	070.1	PAPER	39	PHR	35

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
889	ISOPENTYL ACETATE 1Y2OV1 C 7 H14 O2										
		1	2	01	3	6.00E-04/04	130.2	PAPER	39	PHR	35
890	ISOPENTYL ISOVALERATE 1Y&2OV1Y C10 H20 O2										
		1	2	01	3	8.00E-04/04	204.3	PAPER	39	PHR	35
891	ISOPENTYL MERCAPTAN SH2Y C 5 H12 S										
		1	2	01	3	3.00E-04/04	108.2	PAPER	39	PHR	35
892	ISOPENTYL SULFIDE 1Y&2S2Y C10 H22 S										
		1	2	01	3	3.00E-03/04	117.2	PAPER	39	PHR	35
893	BENZALDEHYDE VHR C 7 H 6 O										
		1	2	01	3	3.00E-03/04	108.1	PAPER	39	PHR	35
894	BENZYL CHLORIDE G1R C 7 H 7 CL										
		1	2	01	3	1.60E-03/04	126.6	PAPER	39	PHR	35
895	BENZYL MERCAPTAN SH1R C 7 H 8 S										
		1	2	01	3	1.90E-04/04	124.2	PAPER	39	PHR	35
896	BENZYL SULFIDE R1S1R C14 H14 S										
		1	2	01	3	6.00E-04/04	214.3	PAPER	39	PHR	35

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
897	BROMOACETONE E1V1 C 3 H 5 BR O	1	2	01	3	5.00E-04/04	136.0	PAPER	39	PHR	35
898	W&-BROMOACETOPHENONE E1VR C 8 H 7 BR O	1	2	01	3	6.40E-04/04	213.0	PAPER	39	PHR	35
899	2-BUTENE 2U2 C 4 H 8	1	2	01	3	5.90E-02/04	056.1	PAPER	39	PHR	35
900	1-BUTENE 3U1 C 4 H 8	1	2	01	3	5.00E-02/04	056.1	PAPER	39	PHR	35
901	1-BUTANETHIOL SH4 C 4 H10 S	1	2	01	3	1.40E-03/04	074.1	PAPER	39	PHR	35
902	BUTYL SULFIDE 4S4 C 8 H18 S	1	2	01	3	1.10E-03/04	146.2	PAPER	39	PHR	35
903	CROTYL MERCAPTAN SH2U2 C 4 H 8 S	1	2	01	3	2.90E-05/04	088.2	PAPER	39	PHR	35
904	COUMARIN T66 BOVJ C 9 H 6 O2	1	2	01	3	3.40E-04/04	146.2	PAPER	39	PHR	35

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME / WLN / FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
905	CARBON DISULFIDE SCS C S2	1	2	01	3	2.60E-03/04	076.1	PAPER	39	PHR	35
906	MUSK XYLENE WNR B D CNW ENW FX C12 H15 N3 O6	1	2	01	3	1.00E-05/04	282.2	PAPER	39	PHR	35
907	PHENYL ETHER ROR C12 H10 O	1	2	01	3	6.90E-05/04	170.2	PAPER	39	PHR	35
908	TR-DICHLOROETHYLENE G1U1G -T C 2 H 2 CL2	1	2	01	3	4.30E-03/04	096.9	PAPER	39	PHR	35
909	PHENYL SULFIDE RSR C12 H10 S	1	2	01	3	4.80E-05/04	186.2	PAPER	39	PHR	35
910	1,2-ETHANEDITHIOL SH2SH C 2 H 6 S2	1	2	01	3	1.60E-03/04	094.2	PAPER	39	PHR	35
911	ETHANETHIOL SH2 C 2 H 6 S	1	2	01	3	1.90E-04/04	064.1	PAPER	39	PHR	35
912	HYDROGEN SULFIDE SHH H2 S 1777	1	2	01	3	1.10E-03/04	034.1	PAPER	39	PHR	35

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
913	METHYL ANTHRANILATE ZR BVO1 C 8 H 9 N O2	1	2	01	3	3.70E-04/04	183.2	PAPER	39	PHR	35
914	METHANETHIOL SH1 C H 4 S	1	2	01	3	1.10E-03/04	048.1	PAPER	39	PHR	35
915	NITROBENZENE WNR C 6 H 5 N O2	1	2	01	3	3.00E-02/04	123.0	PAPER	39	PHR	35
916	1-PROPANETHIOL SH3 C 3 H 8 S	1	2	01	3	7.50E-05/04	076.1	PAPER	39	PHR	35
917	PYRIDINE T6NJ C 5 H 5 N	1	2	01	3	3.70E-03/04	091.1	PAPER	39	PHR	35
918	PHENYL ISOTHIOCYANATE SCNR C 7 H 5 N S	1	2	01	3	2.40E-03/04	131.0	PAPER	39	PHR	35
919	PHENYL ISONITRILE CNR C 7 H 5 N	1	2	01	3	2.90E-05/04	093.0	PAPER	39	PHR	35
920	BENZENETHIOL SHR C 6 H 6 S	1	2	01	3	1.00E-04/04	124.1	PAPER	39	PHR	35

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
921	PROPYL SULFIDE 3S3 C 6 H14 S	1	2	01	3	8.10E-04/04	118.0	PAPER	39	PHR	35
922	ETHYL SULFIDE 2S2 C 4 H10 S	1	2	01	3	2.50E-04/04	090.0	PAPER	39	PHR	35
923	PROPIONALDEHYDE VH2 C 3 H 6 O	1	2	01	3	2.20E-03/04	054.1	PAPER	39	PHR	35
924	METHYL SULFIDE 1S1 C 2 H 6 S	1	2	01	3	1.10E-03/04	062.1	PAPER	39	PHR	35
925	PHENYL ISONITRILE CNR C 7 H 5 N	1	2	01	3	4.20E-09/22	103.0	PAPER	30	BMTP	
926	ISOPENTYL MERCAPTAN SH2Y C 5 H12 S	1	2	01	3	1.80E-09/22	104.2	PAPER	30	BMTP	
927	ETHYL SULFIDE 2S2 C 4 H10 S	1	2	01	3	1.00E-08/22	090.2	PAPER	30	BMTP	
928	PROPIONALDEHYDE VH2 C 3 H 6 O	1	2	01	3	3.50E-07/22	058.1	PAPER	30	BMTP	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
929	ACETALDEHYDE VH1 C 2 H 4 O	1	2	01	3	1.20E-07/22	044.1	PAPER	30	BMTP	
930	ACROLEIN VH1U1 C 3 H 4 O	1	2	01	3	4.10E-06/22	056.1	PAPER	30	BMTP	
931	ALLYL ISOCYANIDE CN2U1 C 4 H 5 N	1	2	01	3	4.90E-08/22	067.0	PAPER	30	BMTP	
932	ALLYL MERCAPTAN SH2U1 C 3 H 6 S	1	2	01	3	1.12E-08/22	074.0	PAPER	30	BMTP	
933	ALLYLAMINE Z2U1 C 3 H 7 N	1	2	01	3	1.40E-06/22	057.1	PAPER	30	BMTP	
934	ALLYL ALCOHOL Q2U1 C 3 H 6 O	1	2	01	3	3.30E-06/22	058.1	PAPER	30	BMTP	
935	ALLYL ISOTHIOCYANATE SCN2U1 C 4 H 5 N S	1	2	01	3	6.10E-07/22	099.2	PAPER	30	BMTP	
936	ISOPENTYL ACETATE 1Y2OV1 C 7 H14 O2	1	2	01	3	1.80E-08/22	130.2	PAPER	30	BMTP	

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
937	ISOPENTYL ISOVALERATE 1Y&2OV1Y C10 H20 O2	1	2	01	3	4.60E-08/22	172.3	PAPER	30	8MTP	
938	AMYLENE 2UY C 5 H10	1	2	01	3	5.40E-07/22	070.1	PAPER	30	BMTP	
939	METHYL SULFIDE 1S1 C 2 H 6 S	1	2	01	3	9.40E-09/22	186.3	PAPER	30	8MTP	
940	8ENZALDEHYDE VHR C 7 H 6 O	1	2	01	3	1.80E-07/22	106.1	PAPER	30	8MTP	
941	BENZYL SULFIDE R1S1R C14 H14 S	1	2	01	3	5.30E-08/22	214.3	PAPER	30	BMTP	
942	8ENZYL MERCAPTAN SH1R C 7 H 8 S	1	2	01	3	1.30E-08/22	124.2	PAPER	30	8MTP	
943	1-8UTENE 3U1 C 4 H 8	1	2	01	3	2.10E-06/22	056.1	PAPER	30	8MTP	
944	TR-2-8UTENE 2U2 -T C 4 H 8	1	2	01	3	4.80E-06/22	056.1	PAPER	30	BMTP	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
945	1-BUTENE 3U1 C 4 H 8										
		1	2	01	3	3.00E-06/22	056.1	PAPER	30	BMTP	
946	CROTONALDEHYDE VH1U2 C 4 H 6 O										
		1	2	01	3	3.75E-02/22	070.1	PAPER	30	BMTP	
947	BUTYL SULFIDE 4S4 C 8 H18 S										
		1	2	01	3	9.00E-08/22	146.3	PAPER	30	BMTP	
948	1-BUTANETHIOL SH4 C 4 H10 S										
		1	2	01	3	3.20E-09/22	090.2	PAPER	30	BMTP	
949	COUMARIN T66 BOVJ C 9 H 6 O2										
		1	2	01	3	2.00E-08/22	146.1	PAPER	30	BMTP	
950	CROTYL MERCAPTAN SH2U2 C 4 H 8 S										
		1	2	01	3	9.15E-10/22	088.0	PAPER	30	BMTP	
951	ALLYL SULFIDE 1U2S2U1 C 6 H10 S										
		1	2	01	3	7.20E-09/22	114.2	PAPER	30	BMTP	
952	PROPYL SULFIDE 3S3 C 6 H14 S										
		1	2	01	3	5.30E-08/22	118.2	PAPER	30	BMTP	

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
953	DIISOAMYL SULFIDE 2Y&1S1Y2 C10 H22 S	1	2	01	3	2.10E-08/22	174.0	PAPER	30	BMTP	
954	ALLYL DISULFIDE 1U2SS2U1 C 6 H10 S2	1	2	01	3	6.50E-10/22	146.0	PAPER	30	BMTP	
955	PHENYL SULFIDE RSR C12 H10 S	1	2	01	3	2.60E-09/22	186.3	PAPER	30	BMTP	
956	PHENYL ETHER ROR C12 H10 O	1	2	01	3	7.00E-09/22	226.3	PAPER	30	BMTP	
957	MUSK XYLENE WNR B C CNW ENW FX C12 H15 N3 O6	1	2	01	3	3.32E-09/22	297.0	PAPER	30	BMTP	
95B	ETHANETHIOL SH2 C 2 H 6 S	1	2	01	3	3.59E-09/22	062.1	PAPER	30	BMTP	
959	1,2-ETHANEDITHIOL SH2SH C 2 H 6 S2	1	2	01	3	1.20E-02/22	094.0	PAPER	30	BMTP	
960	METHYL ANTHRANILATE ZR 8VO1 C 8 H 9 N O2	1	2	01	3	5.80E-08/22	151.2	PAPER	30	BMTP	

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
961	METHANETHIOL SH1 C H 4 S	1	2	01	3	8.10E-08/22	048.0	PAPER	30	BMTP	
962	NITROBENZENE WNR C 6 H 5 N 02	1	2	01	3	9.60E-06/22	123.1	PAPER	30	BMTP	
963	PYRIDINE T6NJ C 5 H 5 N	1	2	01	3	7.40E-07/22	079.1	PAPER	30	BMTP	
964	PHENYL ISOTHIOCYANATE SCNR C 7 H 5 N S	1	2	01	3	5.20E-07/22	135.0	PAPER	30	BMTP	
965	BENZENETHIOL SHR C 6 H 6 S	1	2	01	3	1.20E-09/22	110.0	PAPER	30	BMTP	
966	X-THIOCRESOL SHR X C 7 H 8 S	1	2	01	3	1.40E-08/22	124.2	PAPER	30	BMTP	
967	2T-UNDECENAL VH1U9 -T C11 H20 O	1	1	05	3	1.50E+02/01	168.0	JAOCA	64	41	326
968	UNDECANAL VH10 C11 H22 O	1	1	05	3	6.80E+00/01	168.0	JAOCA	64	41	326

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
969	SABINENE L35 DYTJ AY DU1 C10 H16										
		1	2	02	3	7.50E+01/06	136.2	JAFCA	68	16	1009
970	TERPINOLENE L6Y CUTJ AUY D C10 H16										
		1	2	02	3	2.00E+02/06	136.2	JAFCA	68	16	1009
971	A&-TERPINEOL L6UTJ A DXQ C10 H18 O										
		1	2	02	3	3.40E+02/06	154.3	JAFCA	68	16	1009
972	A&-TERPINEOL L6UTJ A DXQ C10 H18 O										
		1	2	02	3	3.50E+02/06	154.2	JAFCA	68	16	1009
973	UNDECANAL VH10 C11 H22 O										
		1	2	02	3	5.00E-09/06	170.3	JSFAA	63	14	761
974	8UTYRIC ACID QV3 C 4 H 8 O2										
		1	2	01	3	4.50E+02/11	088.1	PEORA	67	58	172
975	8UTYRIC ACIO QV3 C 4 H 8 O2										
		1	2	02	3	4.50E+05/11	088.1	PEORA	67	58	172
976	ACETONE 1V1 C 3 H 6 O										
		1	1	04	3	5.00E+02/01	058.1	FOREA	57	22	316

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
977	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	1	03	3	2.50E+01/01	088.1	FOREA	57	22	316
978	VALERALDEHYDE VH4 C 5 H10 O										
		1	2	05	3	2.40E-01/01	086.1	JAOCA	64	41	326
979	2T-PENTENAL VH1U3 -T C 5 H 8 O										
		1	2	05	3	2.30E+00/01	084.0	JAOCA	64	41	326
980	Pa-PROPENYLANISOLE 2U1R 001 C10 H12 O										
		1	2	99	3	1.00E-06/09	148.2	ANYAA	64	116	567
981	Pa-PROPENYLANISOLE 2U1R 001 C10 H12 O										
		1	2	99	3	1.00E-03/09	148.2	ANYAA	64	116	567
982	ACETIC ACID QV1 C 2 H 4 O2										
		1	2	01	3	4.00E-13/19	060.1	JGCRA	68	6	114
983	ACETIC ACID QV1 C 2 H 4 O2										
		1	1	02	3	5.40E+01/01	060.1	JFOSA	64	29	679
984	ACETALDEHYDE VH1 C 2 H 4 O										
		1	1	04	3	1.30E+00/01	044.1	FOREA	57	22	316

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
985	ISOBUTYL ALCOHOL Q1Y C 4 H10 O	1	1	99	3	7.50E+03/01	074.1	JSFAA	67	18	583
986	1-BUTANOL Q4 C 4 H10 O	1	2	01	3	1.10E-13/19	074.1	JGCRA	68	6	144
987	BORNYL ACETATE L55 ATJ A A B CQ C12 H22 O2	1	2	02	3	7.50E+01/06	196.3	JAFCA	68	16	1009
988	CROTONALDEHYDE VH1U2 C 4 H 6 O	1	2	02	3	4.50E-08/06	070.1	JSFAA	63	14	761
989	OCTANOIC ACID QV7 C 8 H16 O2	1	1	02	3	3.50E+00/01	144.2	JFDSA	64	29	679
990	HEXANOIC ACID QV5 C 6 H12 O2	1	1	03	3	1.40E+01/01	116.2	FOREA	57	22	316
991	HEXANOIC ACID QV5 C 6 H12 O2	1	1	02	3	5.40E+01/01	116.2	JFDSA	57	29	679
992	CITRAL VH1UY&3UY C10 H16 O	1	2	99	3	1.00E-04/09	152.2	ANYAA	64	116	567

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
993	CITRAL VH1UY&3UY C10 H16 O	1	2	99	3	1.00E-06/09	152.2	ANYAA	64	116	567
994	CAROTOL L57 GUTJ AQ BY E H C15 H26 O	1	2	02	3	8.00E+00/06	222.0	JAFCA	68	16	1009
995	CINEOLE-1,8 T66 A B AOTJ 8 8 F C10 H18 O	1	2	02	3	1.20E-02/01	154.2	JFDSA	66	31	118
996	ETHYLENE OICHLORIDE G2G C 2 H 4 CL2	1	2	02	3	2.90E+01/01	099.0	JFDSA	66	31	118
997	LAURALDEHYOE VH11 C12 H24 O	1	2	05	3	3.00E+00/01	184.3	JAOCA	64	41	326
998	METHANETHIOL SH1 C H 4 S	1	1	02	3	2.00E-03/01	048.1	FOREA	57	22	316
999	2T,7T-DECAOIENAL VH1U5U3 -TT C10 H16 O	1	2	05	3	1.00E+00/01	152.0	JAOCA	64	41	326
1000	METHYL SULFIDE 1S1 C 2 H 6 S	1	1	02	3	1.20E-02/01	062.1	FOREA	57	22	316

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1001	METHIONAL VHYZ2S1 C 5 H11 N O S										
		1	1	04	3	5.00E-02/01	133.0	FOREA	57	22	316
1002	2T,6T-NONADIENAL VH1U4U3 -TT C 9 H14 O										
		1	2	05	3	2.10E-01/01	138.0	JAOCA	64	41	326
1003	2T-NONENAL VH1U7 -T C 9 H16 O										
		1	2	05	3	3.20E+00/01	140.0	JAOCA	64	41	326
1004	2T,4T-NONADIENAL VH1U2U5 -TT C 9 H14 O										
		1	2	05	3	2.50E+00/01	138.0	JAOCA	64	41	326
1005	2T,6C-NONADIENAL VH1U4U3 -TC C 9 H14 O										
		1	2	05	3	1.00E-02/01	138.0	JAOCA	64	41	326
1006	6T-NONENAL VH5U3 -T C 9 H16 O										
		1	2	05	3	5.00E-04/01	140.0	JAOCA	67	41	543
1007	2-NONENAL VH1U7 C 9 H16 O6										
		1	2	02	3	8.00E-02/06	140.0	JSFAA	63	14	761
1008	2T-NONENAL VH1U7 -T C 9 H16 O										
		1	2	02	3	8.00E-02/06	140.0	JAFCA	68	16	1009

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

COMPILATION OF ODOR AND TASTE THRESHOLD VALUES DATA

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1009	2T,4T-OCTADIENAL VH1U2U4 -TT C 8 H12 O										
		1	2	05	3	1.00E+00/01	124.0	JAOCA	64	41	326
1010	VALERALDEHYDE VH4 C 5 H10 O										
		1	2	02	3	1.20E+08/06	086.1	JSFAA	63	14	761
1011	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	1	02	3	6.80E+00/01	088.1	JFOSA	64	29	679
1012	BUTYRIC ACID QV3 C 4 H 8 O2										
		1	1	03	3	2.50E+01/01	088.1	FOREA	57	22	316
1013	METHYL ETHYL KETONE 2V1 C 4 H 8 O										
		1	1	03	3	5.00E+01/01	072.1	FOREA	57	22	316
1014	METHYL SULFIDE 1S1 C 2 H 6 S										
		1	1	02	3	1.20E-02/01	174.4	FOREA	57	22	316
1015	DIMETHYL DISULFIDE 1SS1 C 2 H 6 S2										
		1	1	03	3	2.10E-02/01	174.4	FOREA	57	22	316
1016	CYCLOPENTYL ACETATE L5TJ AOV1 C 7 H12 O2										
		1	2	02	3	2.10E+01/06	128.0	JAFCA	66	14	253

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1017	ISOPENTYL ALCOHOL Q2Y C 5 H12 O										
		1	1	99	3	3.30E+02/01	088.2	JSFAA	67	18	583
1018	ISOPENTYL ALCOHOL Q2Y C 5 H12 O										
		1	1	99	3	3.10E+02/01	088.2	JSFAA	67	18	583
1019	ISOPENTYL ALCOHOL Q2Y C 5 H12 O										
		1	1	02	3	4.00E+00/01	088.2	JSFAA	67	18	583
1020	METHYL 6-DECENOATE 4U5V01 C11 H22 02										
		1	2	02	3	3.00E+00/06	186.3	JSFAA	66	17	142
1021	HUMULENE										
		1	2	02	3	1.20E+02/06	204.4	JSFAA	66	17	142
1022	HEXYL PROPIONATE 6OV2 C 9 H18 02										
		1	2	02	3	8.00E+00/06	186.1	JSFAA	66	17	142
1023	DIMETHYL DISULFIDE 1SS1 C 2 H 6 S2										
		1	1	04	3	2.10E-02/01	094.0	FOREA	57	22	316
1024	PENTYL ACETATE 5OV1 C 7 H14 02										
		1	2	02	3	5.00E-03/01	130.0	JAFCA	67	15	29

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1025	1-PROPANOL Q3 C 3 H 8 O										
		1	1	99	3	7.50E+03/01	239.2	JSFAA	67	18	583
1026	ACROLEIN VH1U1 C 3 H 4 O										
		1	2	02	3	1.10E+01/01	056.1	JSFAA	63	14	61
1027	2-PENTYLFURAN T5OJ B5 C 9 H14 O										
		1	1	99	3	1.00E+00/01	138.0	JAOCA	67	44	509
1028	2T,5C-OCTADIENAL VH1U3U3 -TC C 8 H12 O										
		1	2	05	3	1.50E+01/01	124.0	JAOCA	64	41	326
1029	2T-OCTENAL VH1U6 -T C 8 H14 O										
		1	2	05	3	7.00E+00/01	126.0	JAOCA	64	41	326
1030	G&-NONALACTONE T5OVTJ E5 C 9 H16 O2										
		1	2	02	3	1.00E-09/15	174.2	JFDSA	66	31	268
1031	MYRISTICIN										
		1	2	02	3	2.50E+01/06	192.0	JAFCA	68	16	1009
1032	2T,7C-DECADIENAL VH1U5U3 -TC C10 H16 O										
		1	2	05	3	4.80E-02/01	152.0	JAOCA	64	41	326

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1033	2T,4T-DECADIENAL VH1U2U6 -TT C10 H16 O										
		1	2	05	3	2.15E+00/01	152.0	JAOCA	64	41	326
1034	2T-DECENAL VH1U8 -T C10 H18 O										
		1	2	05	3	3.38E+01/01	154.0	JAOCA	64	41	326
1035	ISOBUTENE 1YU1 C 4 H 8										
		1	2	01	1	5.00E-02/13	056.1	MONO	31	BMAG	
1036	2-BUTENE 2U2 C 4 H 8										
		1	2	01	1	5.90E-02/13	056.1	MONO	31	BMAG	
1037	W&-BROMOACETOPHENONE E1VR C 8 H 7 BR O										
		1	2	01	1	6.40E-04/13	199.0	MONO	31	BMAG	
1038	ACETALDEHYDE VH1 C 2 H 4 O										
		1	1	99	4	1.10E-01/01	044.0	JFDSA	69	34	265
1039	DIACETYL 1VV1 C 4 H 6 O2										
		1	1	99	3	2.00E-01/01	086.0	JFDSA	65	30	35
1040	DIACETYL 1VV1 C 4 H 6 O2										
		1	1	99	3	5.00E-02/01	086.0	JFDSA	65	30	35

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1041	DIACETYL 1VV1 C 4 H 6 O2	1	1	99	3	5.00E-03/01	086.0	JFOSA	65	30	35
1042	DIACETYL 1VV1 C 4 H 6 O2	1	1	04	3	1.00E-01/01	086.0	JFOSA	65	30	35
1043	G&-DECALACTONE T5OVTJ E6 C10 H18 O2	1	1	02	3	9.00E-02/01	188.3	JFOSA	68	33	213
1044	D&-OOOECALACTONE T6OVTJ F7 C12 H22 O2	1	1	02	3	1.00E+00/01	188.3	JFOSA	68	33	213
1045	8UTYRIC ACIO QV3 C 4 H 8 O2	1	1	99	3	6.C0E-01/01	088.1	AFECA	61	54	308
1046	LINOLEIC ACID QV8U3U6 -CC C18 H32 O2	1	1	99	3	1.10E+04/01	280.4	AFECA	61	54	308
1047	OCTANOIC ACIO QV7 C 8 H16 O2	1	1	99	3	3.50E+02/01	144.2	AFECA	61	54	308
1048	OECANOIC ACIO QV9 C10 H20 O2	1	1	99	3	2.00E+02/01	172.3	AFECA	61	54	308

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1049	LAURIC ACID QV11 C12 H24 O2										
		1	1	99	3	7.00E+02/01	200.3	AFECA	61	54	308
1050	PALMITIC ACID QV15 C16 H32 O2										
		1	1	99	3	1.00E+04/01	256.4	AFECA	61	54	308
1051	MYRISTIC ACID QV13 C14 H28 O2										
		1	1	99	3	5.00E+04/01	228.4	AFECA	61	54	308
1052	STEARIC ACID QV17 C18 H36 O2										
		1	1	99	3	1.50E+04/01	284.5	AFECA	61	54	308
1053	OLEIC ACID QV8U9 -C C18 H34 O2										
		1	1	99	3	8.00E+04/01	282.5	AFECA	61	54	308
1054	HEXANOIC ACID QV5 C 6 H12 O2										
		1	1	99	3	2.50E+00/01	116.2	AFECA	61	54	308
1055	2-HEPTANONE 5V1 C 7 H14 O										
		1	2	01	3	8.97E-04/13	114.1	JFDSA	62	27	197
1056	IONONE, A&- L6UTJ A E E F1U1V1 C13 H20 O										
		1	1	02	2	4.00E-04/01	192.3	JFDSA	68	33	213

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1057	ETHYL CINNAMATE 2OV1U1R C11 H12 O2										
		1	1	02	2	1.60E-02/01	176.2	JFDSA	68	33	213
1058	ISOPENTYL ALCOHOL Q2Y C 5 H12 O										
		1	1	02	2	1.70E-01/01	088.1	JFDSA	68	33	213
1059	ETHYL VALERATE 4VO2 C 7 H14 O2										
		1	1	02	2	9.40E-02/01	130.1	JFDSA	68	33	213
1060	ETHYL ACETOACETATE 2OV1V1 C 6 H10 O3										
		1	1	02	2	5.20E-01/01	130.1	JFDSA	68	33	213
1061	BENZALDEHYDE VHR C 7 H 6 O										
		1	1	02	2	1.50E+00/01	106.1	JFDSA	68	33	213
1062	PENTYL BUTYRATE 5OV3 C 9 H18 O2										
		1	1	02	2	1.30E+00/01	158.2	JFDSA	68	33	213
1063	PIPERONAL T56 BO DO CHJ GVH C 8 H 6 O3										
		1	1	02	2	3.90E-03/01	150.1	JFDSA	68	33	213
1064	ETHYL BUTYRATE 3VO2 C 6 H12 O2										
		1	1	02	2	4.50E-01/01	132.1	JFDSA	68	33	213

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1065	OCTYL ALCOHOL Q8 C 8 H18 O										
		2	2	01	3	4.90E-01/01	130.2	PEPSB	67	2	167
1066	1-HEPTANOL Q7 C 7 H16 O										
		2	2	01	4	5.09E-01/01	116.2	PEPSB	67	2	167
1067	5,5-DIMETHYL-1,3-CYCLOHX%DIONE L6V CVTJ E E C10 H18 O										
		2	2	01	4	4.28E-02/01	140.2	PEPSB	67	2	167
1068	ISOPROPYLACETONE 1Y1V1 C 6 H12 O										
		2	2	01	4	9.73E-02/01	100.1	PEPSB	67	2	167
1069	ALLYL ISOTHIOCYANATE SCN2U1 C 4 H 5 N S										
		2	2	01	4	1.92E-01/01	099.1	PEPSB	67	2	167
1070	CYCLOHEXANONE L6VTJ C 6 H10 O										
		1	2	01	4	1.23E-05/04	098.1	PEPSB	67	2	167
1071	PHENYL ISOTHIOCYANATE SCNR C 7 H 5 N S										
		1	2	01	4	1.02E-06/04	135.1	PEPSB	67	2	167
1072	METHYL ISONITRILE CN1 C2 H 3 N										
		2	2	02	3	9.60E-08/15	041.0	PEPSB	67	2	167

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1073	METHYL ISONITRILE CN1 C2 H 3 N	1	2	02	3	6.90E-09/15	041.0	PEPSB	67	2	167
1074	METHYL ISONITRILE CN1 C2 H 3 N	2	2	99	3	3.63E-06/15	041.0	PEPSB	67	2	167
1075	METHYL ISONITRILE CN1 C2 H 3 N	1	2	99	3	3.63E-06/15	041.0	PEPSB	67	2	167
1076	PHENYL ISONITRILE CNR C 7 H 5 N	1	2	99	3	1.09E-03/15	103.0	PEPSB	67	2	167
1077	PHENYL ISONITRILE CNR C 7 H 5 N	1	2	99	3	1.09E-03/15	103.0	PEPSB	67	2	167
1078	TERT-BUTYL ISOCYANIDE CNX C 5 H 9 N	1	2	02	3	1.67E-06/15	083.0	PEPSB	67	2	167
1079	TERT-BUTYL ISOCYANIDE CNX C 5 H 9 N	2	2	02	3	1.67E-06/15	083.0	PEPSB	67	2	167
10B0	2-METHYLBUTYRIC ACID QVY2 C 5 H10 02	1	1	02	2	1.60E+00/01	088.1	JFDSA	68	33	213

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1081	XYLENE -/MIXED/ 1R X C 8 H10										
		1	2	01	3	5.00E-05/01	106.2	BOOKC	51		100
1082	VANILLIN VHR DQ CO1 C 8 H 8 03										
		1	2	01	3	2.00E-04/06	152.1	BOOKC	51		100
1083	X-CHLOROPHENOL QR XG C 6 H 5 CL O										
		1	2	01	3	3.00E-02/06	128.6	BOOKC	51		100
1084	BUTYRIC ACID QV3 C 4 H 8 02										
		1	2	01	3	8.00E-01/06	088.1	BOOKC	51		100
1085	SKATOLE T56 BMJ D C 9 H 9 N										
		1	2	01	3	3.00E-04/06	131.1	BOOKC	51		100
1086	PHENOL QR C 6 H 6 O										
		1	2	01	3	1.00E+00/01	094.1	BOOKC	51		100
1087	PYRIDINE T6NJ C 5 H 5 N										
		1	2	01	3	3.00E-02/01	079.1	BOOKC	51		100
1088	STRYCHNINE HCL T6 G656 B7 C6 E5 O 5ABCEF A& FX* C21 H23 CL N2 O2										
		1	1	02	3	4.00E-04/15	406.9	BOOKC	51		99

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1089	ETHANETHIOL SH2 C 2 H 6 S	1	2	01	3	3.00E-02/06	062.1	BOOKC	51		100
1090	NATURAL MUSK L-15-VTJ C C16 H30 O	1	2	01	3	8.00E-01/06	.	BOOKC	51		100
1091	ETHYL ALCOHOL Q2 C 2 H 6 O	1	2	01	3	4.40E+03/01	046.0	BOOKC	51		97
1092	IODOFORM IYII C H I3	1	2	01	3	5.00E+00/06	393.7	BOOKC	51		100
1093	ETHYL ALCOHOL Q2 C 2 H 6 O	1	9	02	3	2.50E+05/01	046.0	BOOKC	51		97
1094	ETHYL ALCOHOL Q2 C 2 H 6 O	1	1	02	3	1.40E+05/01	046.0	BOOKC	51		97
1095	ETHYL ALCOHOL Q2 C 2 H 6 O	1	1	02	2	5.20E+01/01	046.0	JFDSA	68	33	213
1096	MUSK XYLENE WNR 8 D CNW ENW FX C12 H15 N3 06	1	2	01	3	4.00E-03/01	283.2	BOOKC	51		100

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1097	ETHER 2O2 C 4 H10 O										
		1	2	01	3	7.00E-01/01	074.1	BOOKC	51		100
1098	MUSK XYLENE WNR 8 D CNW ENW FX C12 H15 N3 O6										
		1	2	01	3	5.00E-05/01	297.2	BOOKC	51		101
1099	3-HYDROXY-2-METHYL-4-PYRONE T6O DVJ 8 CQ C 6 H 6 O3										
		1	1	02	2	7.10E-00/01	126.1	JFDSA	68	33	213
1100	CREOSOL QR D 8O1 C 8 H10 O2										
		1	2	02	3	9.00E-02/01	138.0	JFDSA	66	31	1005
1101	CREOSOL QR D BO1 C 8 H10 O2										
		1	2	05	3	4.00E-01/01	138.1	JFDSA	66	31	1005
1102	1-DECYNE 9UU1 C10 H18										
		2	1	05	3	1.00E-01/01	138.3	CHINA	65	43	
1103	VINYL AMYL KETONE 5V1U1 C 8 H14 O										
		1	1	99	3	1.00E+00/06	126.0	JDRSA	62	29	173
1104	VINYL AMYL KETONE 5V1U1 C 8 H14 O										
		1	1	02	3	1.00E+01/06	126.0	JDRSA	62	29	173

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1105	ONION OIL 3SS2U1 && C 6 H12 S2										
		1	2	02	3	8.00E-01/04	.	JAFCA	71	19	984
1106	PROPYL DISULFIDE 3SS3 C 6 H14 S6										
		1	2	02	3	3.20E+00/04	150.3	JAFCA	71	19	984
1107	METHYL PROPENYL DISULFIDE 2U1SS1 C 4 H 8 S2										
		1	2	02	3	6.30E+00/04	120.0	JAFCA	71	19	984
1108	PROPENYL PROPYL DISULFIDE 3SS1U2 C 6 H12 S6										
		1	2	02	3	2.20E+00/04	148.0	JAFCA	71	19	984
1109	3,4-DIMETHYLTHIOPHENE T5SJ C D C 6 H 8 S										
		1	2	02	3	1.30E+00/04	112.0	JAFCA	71	19	984
1110	PROPYL METHANE-THIOSULFATE WS3&S1 C 4 H10 O S2										
		1	2	02	3	1.70E+00/04	154.0	JAFCA	71	19	984
1111	PROPYL PROPANE-THIOSULFATE WS3&S3 C 6 H14 O S2										
		1	2	02	3	1.50E+00/04	182.0	JAFCA	71	19	984
1112	MALIC ACID QVYQ1VQ C 4 H 6 O5										
		1	1	02	1	9.66E-06/09	134.1	JSFAA	S	IN	PRES

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1113	MALIC ACID QVYQ1VQ C 4 H 6 05										
		1	1	02	1	2.92E-06/09	134.1	JSFAA	S	IN	PRES
1114	MALIC ACID QVYQ1VQ C 4 H 6 05										
		1	1	02	1	2.02E-06/09	134.1	JSFAA	S	IN	PRES
1115	QUININE S@ T66 8NJ HO1 EYQ- DT66 A 8 CNTJ A1U1* C40 H50 N4 08 S										
		1	1	02	1	1.75E-09/09	746.9	JSFAA	S	IN	PRES
1116	QUININE S@ T66 8NJ HO1 EYQ- OT66 A 8 CNTJ A1U1* C40 H50 N4 08 S										
		1	1	02	1	2.11E-09/09	746.9	JSFAA	S	IN	PRES
1117	QUININE S@ T66 8NJ HO1 EYQ- OT66 A 8 CNTJ A1U1* C40 H50 N4 08 S										
		1	1	02	1	1.09E-09/09	746.9	JSFAA	S	IN	PRES
1118	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		1	1	02	1	8.42E-06/09	192.1	JSFAA	S	IN	PRES
1119	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		1	1	02	1	1.56E-06/09	192.1	JSFAA	S	IN	PRES
1120	CITRIC ACID QV1XQVQ1VQ C 6 H 8 07										
		1	1	02	1	2.02E-06/09	192.1	JSFAA	S	IN	PRES

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1121	2-METHYLPYRAZINE T6N ONJ 8 C 5 H 6 N2										
		1	2	02	3	1.12E+03/24	130.1	JFDSA	71	21	816
1122	2-METHYLPYRAZINE T6N DNJ B C 5 H 6 N2										
		1	2	05	3	2.82E+02/24	094.1	JFOSA	71	21	816
1123	2,5-DIMETHYLPYRAZINE T6N DNJ 8 E C 6 H 8 N2										
		1	2	02	3	3.20E+02/24	112.1	JFDSA	71	21	816
1124	2,5-DIMETHYLPYRAZINE T6N DNJ B E C 6 H 8 N2										
		1	2	05	3	1.59E+02/24	112.1	JFDSA	71	21	816
1125	2,6-DIMETHYLPYRAZINE T6N DNJ 8 F C 6 H 8 N2										
		1	2	02	3	5.01E+02/24	112.1	JFDSA	71	21	816
1126	2,6-DIMETHYLPYRAZINE T6N DNJ B F C 6 H 8 N2										
		1	2	05	3	7.10E+01/24	112.1	JFSOA	71	21	816
1127	2-ETHYLPYRAZINE T6N ONJ 82 C 6 H 8 N2										
		1	2	02	3	2.00E+02/24	112.1	JFSDA	71	21	816
1128	2-ETHYLPYRAZINE T6N ONJ B2 C 6 H 8 N2										
		1	2	02	3	1.59E+02/24	112.1	JFSOA	71	21	816

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1129	235-TRIMETHYLPYRAZINE T6N DNJ 8 C E C 7 H10 N2	1	2	02	3	7.10E+01/24	124.1	JFSDA	71	21	816
1130	235-TRIMETHYLPYRAZINE T6N DNJ 8 C E C 7 H10 N2	1	2	05	3	2.24E+02/24	124.1	JFSDA	71	21	816
1131	2-ETHYL-3-METHYLPYRAZINE T6N DNJ 82 C C 7 H10 N2	1	2	02	3	4.00E+00/24	130.1	JFSDA	71	21	816
1132	2-ETHYL-3-METHYLPYRAZINE T6N DNJ 82 C C 7 H10 N2	1	2	05	3	7.00E+00/24	130.1	JFSDA	71	21	816
1133	2356-TETRAMETHYLPYRAZINE T6N DNJ 8 C E F C 8 H12 N2	1	2	02	3	7.10E+01/24	136.1	JFSDA	71	21	816
1134	2356-TETRAMETHYLPYRAZINE T6N DNJ B C E F C 8 H12 N2	1	2	05	3	2.82E+02/24	136.1	JFSDA	71	21	816
1135	2,5-DIMETHYL-3-ETHYLPYRAZINE T6N DNJ 8 C2 E C 8 H12 N2	1	2	02	3	3.16E+02/24	138.1	JFSDA	71	21	816
1136	2,5-DIMETHYL-3-ETHYLPYRAZINE T6N DNJ B C2 E C 8 H12 N2	1	2	05	3	1.80E+02/24	138.1	JFSDA	71	21	816

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1137	2,6-DIMETHYL-3-ETHYLPYRAZINE T6N DNJ B2 C E C 8 H12 N2	1	2	02	3	1.12E+02/24	138.1	JFSDA	71	21	816
1138	2,6-DIMETHYL-3-ETHYLPYRAZINE T6N DNJ B2 C E C 8 H12 N2	1	2	05	3	1.78E+02/24	138.1	JFSDA	71	21	816
1139	2-PENTYLPYRAZINE T6N DNJ B5 C 9 H14 N2	1	2	02	3	7.00E+00/24	150.0	JFSDA	71	21	816
1140	2-PENTYLPYRAZINE T6N DNJ B5 C 9 H14 N2	1	2	05	3	5.70E+01/24	150.0	JFSDA	71	21	816
1141	2T-NONENAL VH1U7 -T C 9 H16 O	1	2	05	3	3.50E+00/01	140.0	JAOCA	71	48	143
1142	2T-NONENAL VH1U7 -T C 9 H16 O	1	1	05	3	1.00E-01/01	140.0	JAOCA	71	48	143
1143	3C-NONENAL VH2U6 -C C 9 H16 O	1	1	05	3	3.30E-02/01	140.0	JAOCA	71	48	143
1144	3C-NONENAL VH2U6 -C C 9 H16 O	1	1	05	3	2.50E-01/01	140.0	JAOCA	71	48	143

Coding Key

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1145	4C-NONENAL VH3U5 -C C 9 H16 O										
		1	1	05	3	7.00E-03/01	140.0	JAOCA	71	48	143
1146	4C-NONENAL VH3U5 -C C 9 H16 O										
		1	2	05	3	8.00E-02/01	140.0	JAOCA	71	48	143
1147	4T-NONENAL VH3U5 -T C 9 H16 O										
		1	2	05	3	2.00E+00/01	140.0	JAOCA	71	48	143
1148	4T-NONENAL VH3U5 -T C 9 H16 O										
		1	1	05	3	4.00E-02/01	140.0	JAOCA	71	48	143
1149	5C-NONENAL VH4U4 -C C 9 H16 O										
		1	1	05	3	2.50E-01/01	140.0	JAOCA	71	48	143
1150	5C-NONENAL VH4U4 -C C 9 H16 O										
		1	1	05	3	2.50E-02/01	140.0	JAOCA	71	48	143
1151	5T-NONENAL VH4U4 -T C 9 H16 O										
		1	2	05	3	4.50E-01/01	140.0	JAOCA	71	48	143
1152	5T-NONENAL VH4U4 -T C 9 H16 O										
		1	1	05	3	5.50E-02/01	140.0	JAOCA	71	48	143

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1153	6C-NONENAL VH5U3 -C C 9 H16 O										
		1	2	05	3	4.00E-02/01	140.0	JAOCA	71	48	143
1154	6C-NONENAL VH5U3 -C C 9 H16 O										
		1	1	05	3	2.00E-03/01	140.0	JAOCA	71	48	143
1155	6T-NONENAL VH5U3 -T C 9 H16 O										
		1	2	05	3	5.00E-03/01	140.0	JAOCA	71	48	143
1156	6T-NONENAL VH5U3 -T C 9 H16 O										
		1	1	05	3	3.00E-04/01	140.0	JAOCA	71	48	143
1157	7C-NONENAL VH6U2 -C C 9 H16 O										
		1	2	05	3	4.00E-01/01	140.0	JAOCA	71	48	143
1158	7C-NONENAL VH6U2 -C C 9 H16 O										
		1	1	05	3	6.00E-02/01	140.0	JAOCA	71	48	143
1159	7T-NONENAL VH6U2 -T C 9 H16 O										
		1	2	05	3	1.00E+00/01	140.0	JAOCA	71	48	143
1160	7T-NONENAL VH6U2 -T C 9 H16 O										
		1	1	05	3	1.00E-01/01	140.0	JAOCA	71	48	143

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1161	8-NONENAL VH7U1 C 9 H16 O	1	2	05	3	2.CCE+00/01	140.0	JAOCA	71	48	143
1162	8-NONENAL VH7U1 C 9 H16 O	1	1	05	3	3.50E-01/01	140.0	JAOCA	71	48	143
1163	3C-HEXENAL VH3U3 C 6 H10 O	1	2	02	3	2.50E-01/06	258.9	JAFCA	71	19	524
1164	ETHYL VINYL KETONE 2V1U1 C 5 H 8 O	1	2	02	3	1.25E+C0/06	084.1	JAFCA	71	19	524
1165	2T-NONENONE-4 5V1U2 -T C 9 H16 O	1	2	02	3	9.00E-01/06	140.2	JAFCA	71	19	524
1166	1-PENTENOL-3 QY2&1U1 C 5 H10 O	1	2	02	3	4.00E+02/06	086.4	JAFCA	71	19	524
1167	3C-HEXENOL-1 Q3U3 -C C 6 H12 O	1	2	02	3	7.00E+01/06	100.2	JAFCA	71	19	524
1168	2-METHYLTHIOACETALDEHYDE VH1S1 C 3 H 6 O6S	1	2	02	3	1.60E+01/06	090.0	JAFCA	71	19	524

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1169	2-METHYLTHIOETHANOL Q2S1 C 3 H 8 O S	1	2	02	3	1.20E+02/06	092.0	JAFCA	71	19	524
1170	2-METHYLTHIOACETALDEHYDE VH1S1 C 3 H 6 O6S	1	2	02	3	5.00E+01/06	126.0	JAFCA	71	19	524
1171	2-METHYL-2T,4-HEPTADIENONE-6 1YU2U1V1 C 8 H12 O	1	2	02	3	3.75E+02/06	124.0	JAFCA	71	19	524
1172	GERANYLACETONE 1Y&U3YU3V1 C13 H22 O	1	2	02	3	6.00E+01/06	194.2	JAFCA	71	19	524
1173	LIMONENE L6UTJ A DYU1 C10 H16	1	2	02	3	1.00E+01/06	136.2	JAFCA	71	19	524
1174	PHENYLACETALDEHYDE VH1R C 8 H 8 O	1	2	02	3	4.00E+00/06	120.1	JAFCA	71	19	524
1175	FURFURAL T5OJ 8VH C 5 H 4 O2	1	2	02	3	6.00E+00/06	096.1	JAFCA	71	19	524
1176	2-ISOBUTYLTHIAZOLE T5N CSJ B1Y C 7 H11 N S	1	2	02	3	3.50E+00/06	185.2	JAFCA	71	19	524

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Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1177	ISOBUTYL ALCOHOL Q1Y C 4 H10 O										
		1	2	02	3	7.00E+00/01	074.1	JSFAA	70	21	597
1178	1-HEXANOL Q6 C 6 H14 O										
		1	2	02	3	5.20E+00/01	102.2	JSFAA	70	21	597
1179	PHENETHYL ALCOHOL Q2R C 8 H10 O										
		1	2	02	3	7.50E+00/01	122.2	JSFAA	70	21	597
1180	ETHYL LACTATE QYV02 C 5 H10 03										
		1	2	02	3	1.40E+01/01	118.1	JSFAA	70	21	597
1181	ETHYL PHENYLACETATE 2OV1R C10 H12 02										
		1	2	02	3	6.50E-01/01	164.2	JSFAA	70	21	597
1182	PROPIONIC ACID QV2 C 3 H 6 02										
		1	2	02	3	2.00E+01/01	074.8	JSFAA	70	21	597
1183	ISOBUTYRIC ACID QVY C 4 H 8 02										
		1	2	02	3	8.10E+00/01	088.1	JSFAA	70	21	597
1184	ISOVALERIC ACID QV1Y C 5 H10 02										
		1	2	02	3	7.00E-01/01	102.1	JSFAA	70	21	597

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1185	N-ETHYLPYRROLE-2-CARBOXALD. T5NJ A2 BVH C 7 H 9 N O										
		1	1	99	3	2.00E+00/01	123.0	JAFCA	70	18	343
1186	3-METHYLCYCLOPENTACIONE-1,2 L5VVTJ C C 6 H 8 02										
		1	1	99	3	5.00E+00/01	112.1	JAFCA	70	18	343
1187	5-METHYL-2-FURFURAL T5OJ BVH E C 6 H 6 02										
		1	1	99	3	1.00E+01/01	110.1	JAFCA	70	18	343
1188	ACETYL FORMOIN 1VYQVV1 C 6 H 8 04										
		1	1	99	3	1.80E+01/01	144.0	JAFCA	70	18	343
1189	3-HYDROXY-2-PYRONE T6OVTJ CQ C 5 H 4 03										
		1	1	99	3	3.00E+01/01	156.1	JAFCA	70	18	343
1190	FURFURYL ALCOHOL T5OJ B1Q C 5 H 6 02										
		1	1	99	3	3.00E+01/01	098.1	JAFCA	70	18	343
1191	TIGLIC ACID QVYU2 -T C 5 H 8 02										
		1	1	99	3	6.00E+01/01	100.1	JAFCA	70	18	343
1192	FURFURAL T5OJ BVH C 5 H 4 02										
		1	1	99	3	8.00E+01/01	096.1	JAFCA	70	18	343

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Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1193	BENZOIC ACID QVR C 7 H 6 02	1	1	99	3	8.50E+01/01	112.1	JAFCA	70	18	343
1194	LEVULINIC ACID QV2V1 C 5 H 8 03	1	1	99	3	1.10E+02/01	116.1	JAFCA	70	18	343
1195	5-METHYLPYRROLE-2-CARBOXALO. T5MJ 8VH E C 6 H 7 N O	1	1	99	3	1.10E+02/01	109.0	JAFCA	70	18	343
1196	2-ACETYLFURAN T5OJ 8V1 C 6 H 6 02	1	1	99	3	1.10E+02/01	110.1	JAFCA	70	18	343
1197	2-ACETYLPYRROLE T5MJ 8V1 C 6 H 7 N O	1	1	99	3	2.00E+02/01	109.1	JAFCA	70	18	343
1198	2-HYDROXYACETYLFURAN T5OJ 8V1Q C 6 H 6 03	1	1	99	3	2.00E+02/01	126.0	JAFCA	70	18	343
1199	5-HYDROXYMETHYLFURFURAL T5OJ 8VH E1Q C 6 H 6 03	1	1	99	3	2.00E+02/01	126.1	JAFCA	70	18	343
1200	G&-8UTYROLACTONE T5OVTJ C 4 H 6 02	1	1	99	3	2.00E+02/01	086.1	JAFCA	70	18	343

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

COMPILATION OF ODOR AND TASTE THRESHOLD VALUES DATA

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1201	2,3-H2-3,5-HO2-6-ME-PYRANONE-4 T6O DVTJ B CQ EQ C 6 H10 O3										
		1	1	99	3	2.00E+02/01	146.0	JAFCA	70	18	343
1202	NONANE 9H C 9 H20										
		1	2	99	2	6.50E+02/01	128.3	JAOCS	71	48	495
1203	1-HEXENE 5U1 C 6 H12										
		1	2	99	2	2.00E-02/01	084.2	JAOCS	71	48	495
1204	1-OCTENE 7U1 C 8 H16										
		1	2	99	2	2.00E+00/01	122.2	JAOCS	71	48	495
1205	1-NONENE 8U1 C 9 H18										
		1	2	99	2	9.00E+00/01	126.0	JAOCS	71	48	495
1206	1-DECENE 9U1 C10 H20										
		1	2	99	2	7.00E+00/01	140.3	JAOCS	71	48	495
1207	1-PENTYNE 4UU1 C 5 H 8										
		1	2	99	2	7.00E-01/01	068.1	JAOCS	71	48	495
1208	1-HEXYNE 5UU1 C 6 H10										
		1	2	99	2	2.00E-01/01	082.2	JAOCS	71	48	495

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1209	1-NONYNE 8UU1 C 9 H16										
		1	2	99	2	5.00E+00/01	124.2	JAOCS	71	48	495
1210	1-DECYNE 9UU1 C10 H18										
		1	2	99	2	4.00E+00/01	138.3	JAOCS	71	48	495
1211	1,3-HEXADIENE 3U2U1 C 6 H10										
		1	2	99	2	2.00E+00/01	082.2	JAOCS	71	48	495
1212	1,5-HEXADIENE 1U4U1 C 6 H10										
		1	2	99	2	5.00E-01/01	082.2	JAOCS	71	48	495
1213	2C,4C-HEXADIENE 2U2U2 -CC C 6 H10										
		1	2	99	2	3.00E+00/01	082.2	JAOCS	71	48	495
1214	2C,4T-HEXADIENE 2U2U2 -CT C 6 H10										
		1	2	99	2	3.00E+01/01	082.2	JAOCS	71	48	495
1215	2T,4T-HEXADIENE 2U2U2 -TT C 6 H10										
		1	2	99	2	3.80E+01/01	082.2	JAOCS	71	48	495
1216	1,4-HEPTADIENE 3U3U1 C 7 H12										
		1	2	99	2	9.00E+00/01	096.2	JAOCS	71	48	495

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1217	1,3-OCTADIENE 5U2U1 C 8 H14										
		1	2	99	2	2.00E+01/01	112.2	JAOCS	71	48	495
1218	1,4-OCTADIENE 4U3U1 C 8 H14										
		1	2	99	2	1.50E+01/01	112.2	JAOCS	71	48	495
1219	2,4-OCTADIENE 4U2U2 C 8 H14										
		1	2	99	2	1.20E+01/01	112.2	JAOCS	71	48	495
1220	2,4-NONADIENE 6U2U1 C 9 H16										
		1	2	99	2	1.20E+01/01	124.0	JAOCS	71	48	495
1221	1,3-NONADIENE 1U7U1 C 9 H16										
		1	2	99	2	1.10E+01/01	124.0	JAOCS	71	48	495
1222	2,4-NONADIENE 6U2U1 C 9 H16										
		1	2	99	3	9.00E+01/01	124.0	JAOCS	71	48	495
1223	2-METHYLFURAN T5OJ B C 5 H 6 O										
		1	2	99	2	2.70E+01/01	082.1	JAOCS	71	48	495
1224	2-ETHYLFURAN T5OJ 82 C 6 H 8 O										
		1	2	99	2	8.00E+00/01	096.1	JAOCS	71	48	495

Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1225	2-PROPYLFURAN T5OJ B3 C 7 H10 O										
		1	2	99	2	6.00E+00/01	110.2	JAOCS	71	48	495
1226	2-BUTYLFURAN T5OJ 84 C 8 H12 O										
		1	2	99	2	1.00E+01/01	124.2	JAOCS	71	48	495
1227	2-PENTYLFURAN T5OJ 85 C 9 H14 O										
		1	2	99	2	2.00E+00/01	138.0	JAOCS	71	48	495
1228	2-VINYLFURAN T5OJ B1U1 C 6 H 6 O										
		1	2	99	2	1.00E+00/01	094.0	JAOCS	71	48	495
1229	1-HEXENOL-3 QY3&1U1 C 6 H12 O										
		1	2	99	9	5.00E-01/01	100.2	JAOCS	71	48	495
1230	1-HEPTENOL-3 QY4&1U1 C 7 H14 O										
		1	2	99	9	3.00E+00/01	128.2	JAOCS	71	48	495
1231	1-OCTENOL-3 QY5&1U1 C 8 H16 O										
		1	2	99	9	9.00E-01/01	128.0	JAOCS	71	48	495
1232	1-NONENOL-3 QY6&1U1 C 9 H18 O										
		1	2	99	9	1.30E+00/01	142.0	JAOCS	71	48	495

Threshold Units

01	Parts per million	09	Moles/liter	17	Molal
02	Micromoles/mole	10	gm/100/ml (water)	18	mg/kg
03	% by volume	11	mg/l (gas)	19	Molecules/cc
04	Milligrams/liter (gas)	12	mg/l (liquid)	20	mg/100 ml
05	Milligrams/liter (liquid)	13	g/ml (air)	21	mg/dl
06	Parts per billion	14	Normality	22	g/l (gas)
07	Micrograms/cubic meter	15	g/l (water)	23	g/ml (H_2O)
08	Pounds/million cubic feet	16	%	24	Micromoles

CODE	NAME WLN FORMULA	TYPE	MODALITY	MEDIA	PURITY	THRESHOLD	MOL WT	JOURNAL	YEAR	VOLUME	PAGE
1233	2-NONENOL-4 QY5&1U2 C 9 H18 O										
		1	2	99	9	1.20E+01/01	142.0	JAOCS	71	48	495
1234	METHYL VINYL KETONE 1V1U1 C 4 H 6 O										
		1	2	99	2	2.00E-01/01	070.0	JAOCS	71	48	495
1235	VINYL ETHYL KETONE 2V1U1 C 5 H 8 O										
		1	2	99	2	2.00E-02/01	084.0	JAOCS	71	48	495
1236	VINYL PROPYL KETONE 3V1U1 C 6 H10 O										
		1	2	99	9	5.00E-03/01	098.0	JAOCS	71	48	495
1237	VINYL BUTYL KETONE 4V1U1 C 7 H12										
		1	2	99	9	7.00E-03/01	112.0	JAOCS	71	48	495
1238	VINYL AMYL KETONE 5V1U1 C 8 H14 O										
		1	2	99	9	1.00E-01/01	126.0	JAOCS	71	48	495

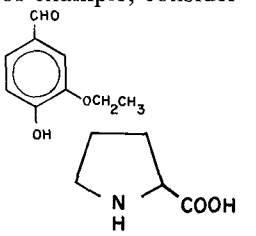
Coding Key

Code for Type = Threshold Type: 1 = detection, 2 = recognition, 3 = not specified, 9 = others
Code for Media: 1 = air, 2 = water, 3 = milk, 4 = skim milk, 5 = paraffin oil, 99 = others
Code for Modality: 1 = taste, 2 = odor, 9 = others
Code for Purity: 1 = C.P., 2 = P, 3 = not specified, 4 = gas chromatically pure

TABLE 3
WLN Permutation of Threshold Chemicals

The WLN is a chemical notation[1] which provides a concise means of representing structures of chemical compounds in an unique and unambiguous manner by a linear arrangement using the 40 characters common to most standard typewriters, cardpunching machines, and computer lineprinters. The notation tends to bring together related compounds when arranged alphabetically by focusing attention on those features of chemical structures that characterize threshold compounds and offers generic searches for functional groups and ring systems simply by scanning the appropriate sections of the computer-produced permuted index.

The various sections of the permuted index have been identified in rather general terms; for example, Chloro compounds, Hydroxyl compounds, Carboxylic acids, Sulfur-containing compounds, Unsaturated compounds, etc. A given chemical compound will appear in *each* section of the permuted index that identifies a functional group or ring system contained within that compound. For example, consider ethyl vanillin: This compound is listed in each of the following sections: Aldehydes, Compounds containing an ether-type oxygen, Hydroxyl compounds, and Compounds containing benzene rings.



Another example is proline: The sections in which proline is listed are: Imino and imido compounds, Saturated and/or heterocyclic rings, Carboxylic acids, and Hydroxyl compounds. Very long structure descriptions (over 41 marks) are truncated with an asterisk mark. Strychnine is such an example.

Simple alkyl groups (unbranched carbon chains) occur so frequently that these symbols are not permuted, except when the notation begins with this alkyl number. All of these appear at the end of the alphabetic part of the permuted listing. Note that none of these final entries have any marks in front of the number (to the left of the colon).

[1] An excellent instructional manual on the use of Wiswesser Line Notation (WLN) is E. G. Smith, *The Wiswesser Line-Formula Chemical Notation,* McGraw-Hill Book Company, New York, 1968.

0018	:	
0061	:	
0204	:	
0268	:	
0267	:	
0299	:	
0879	:	
1021	:	
1031	:	
0457	:	
0488	:	
0461	:	
0535	:	
0540	:	
0534	:	
0613	:	
C799	:	
0797	:	
0798	:	
0201	: ~	INORGANIC
0454	:.BE..G2	COMPOUNDS
0449	:.CA..G2	
0448	:.CA..G2	
0514	:.KA..G	
0513	:.KA..G	
0567	:.LI..G	
0569	:.MG..G2	
0570	:.MG..S-04	
0521	:.NA..E	
0537	:.NA..F	
0529	:.NA..G	
0530	:.NA..G	
0526	:.NA..G	
0520	:.NA..G	
0523	:.NA..G	
0525	:.NA..G	
0527	:.NA..G	
0524	:.NA..G	
0519	:.NA..G	
0522	:.NA..G	
0528	:.NA..G	
0097	:.NA..G	
0096	:.NA..G	
0539	:.NA..I	
0538	:.NA..Q	
0452	:.Z&..G	
0521	.N:A..E	
0537	.N:A..F	
0529	.N:A..G	
0526	.N:A..G	
0522	.N:A..G	
0519	.N:A..G	
0530	.N:A..G	
0525	.N:A..G	
0528	.N:A..G	

0523 .N:A..G
0520 .N:A..G
0527 .N:A..G
0524 .N:A..G
0514 .K:A..G
0513 .K:A..G
0096 .N:A..G
0097 .N:A..G
0449 .C:A..G2
0448 .C:A..G2
0539 .N:A..I
0538 .N:A..Q
0009 T C666 B-:AS- IMJ BG
0014 G1U1-:AS-GG
0031 G-:AS-G1
0017 G-:AS-G2
0008 G-:AS-R&R
0003 NC-:AS-R&R
0454 .:BE..G2
0003 N:C-AS-R&R
0448 .:CA..G2
0449 .:CA..G2 ——— ISOCYANATES, ISONITRILES, OR ISOTHIOCYANATES
0067 N:CG
0074 N:CH
0029 S:CNR
0030 :CNR
0271 :CNR
0250 S:CNR
0829 :CNR
0919 :CNR
0925 :CNR
0918 S:CNR
0964 S:CNR
1076 :CNR
1077 :CNR
1071 S:CNR
0722 O:CNR D
1078 :CNX
1079 :CNX
1072 :CN1
1074 :CN1
1073 :CN1
1075 :CN1
0833 S:CN1
0248 S:CN2
0257 S:CN2U1
0270 :CN2U1
0262 S:CN2U1
0019 :CN2U1
0056 S:CN2U1
1069 S:CN2U1
0935 S:CN2U1
0931 :CN2U1
0883 :CN2U1
0884 S:CN2U1

0905	S:CS	OTHER CARBYL COMPOUNDS (*THIOCYANATES AND NITRILES*)
0683	S:CS	
0072	N:CS1	
0251	N:CS1	
0069	N:CS2	
0113	N:C1U1	
0671	N:C1U1	
0681	E:E	
0521	.NA..:E	
0454	.B:E..G2	BROMO COMPOUNDS
0681	:EE	
0022	:EV1	
0120	:E1VR	
0252	:E1VR	
0898	:E1VR	
1037	:E1VR	
0897	:E1V1	FLUORO COMPOUND
0537	.NA..:F	CHLORO COMPOUNDS
0658	G2O2:G	
0657	G1Y&OY1:G	
0567	.LI..:G	
0596	G2:G	
0452	.Z&..:G	
0528	.NA..:G	
0530	.NA..:G	
0525	.NA..:G	
0513	.KA..:G	
0520	.NA..:G	
0527	.NA..:G	
0523	.NA..:G	
0522	.NA..:G	
0526	.NA..:G	
0519	.NA..:G	
0529	.NA..:G	
0505	GR DSWOR D:G	
0524	.NA..:G	
0514	.KA..:G	
0686	GXGG:G	
0687	G:G	
0685	GXGG:G	
0702	G1:G	
0713	GV:G	
0718	GS:G	
0684	GXGG:G	
0734	VHXGG:G	
0723	GYGU1:G	
0755	GYGUYG:G	
0996	G2:G	
0255	G2S2:G	
0254	QR B:G	
0191	GXGGR DG&R D:G	
0190	QVXG:G	
0200	QV1QR BG DG E:G	
0215	QV1QR BG D:G	
0103	G1Y&OY1:G	

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0118                                          QR D:G
0096                                         .NA..:G
0102                                       QR BG D:G
0097                                         .NA..:G
0009                              T C666 B-AS- IMJ B:G
0012                                          G2S2:G
0011                                            G2:G
0006                                         GXGGV:G
0014                                       G1U1-AS-G:G
0067                                             NC:G
0064                                         WNXGG:G
0068                                            G2:G
082B                                          GYG:G
0323                                         GYGYG:G
0311                                         GY1U1:G
0312                                       GR DSWDR D:G
0316                                          GYGU1:G
0327                                        GXGGXGG:G
020B          L D5 C555 A D- EU JUTJ AG AG BG IG JG K:G
0210             L C555 A IUTJ AG AG BG DG EG HG IG J:G
0209             L C555 A IUTJ AG AG BG DG EG HG IG J:G
0214             L C555 A IUTJ AG AG BG DG EG HG IG J:G
0317                                       QV1OR BG D:G &-NA-
0533                                       DV1OR BG D:G &-NA-
0221                L C555 A EU IUTJ AG AG BG DG HG I:G *
0908                                          G1U1:G -T
0199                                       L55 ATJ-/:G # &&
0319                                       L46 ATJ-/:G # &&
0210                           L C555 A IUTJ A:G AG BG DG EG HG IG JG
0214                           L C555 A IUTJ A:G AG BG DG EG HG IG JG
0209                           L C555 A IUTJ A:G AG BG DG EG HG IG JG
0221                        L C555 A EU IUTJ A:G AG BG DG HG IG *
020B                     L D5 C555 A D- EU JUTJ A:G AG BG IG JG KG
0216                  T E3 D5 C555 A D- FD KUTJ A:G AG BG JG K*
0217                  T E3 D5 C555 A D- FD KUTJ A:G AG BG JG K*
0214                        L C555 A IUTJ AG A:G BG DG EG HG IG JG
0210                        L C555 A IUTJ AG A:G BG DG EG HG IG JG
0209                        L C555 A IUTJ AG A:G BG DG EG HG IG JG
0221                     L C555 A EU IUTJ AG A:G BG DG HG IG *
020B                  L D5 C555 A D- EU JUTJ AG A:G BG IG JG KG
0217               T E3 D5 C555 A D- FD KUTJ AG A:G BG JG K*
0216               T E3 D5 C555 A D- FD KUTJ AG A:G BG JG K*
0215                                       QV1DR B:G DG
0102                                          QR B:G DG
0317                                       QV1OR B:G DG &-NA-
0533                                       DV1DR B:G DG &-NA-
0200                                       QV1DR B:G DG EG
0210                        L C555 A IUTJ AG AG B:G DG EG HG IG JG
0209                        L C555 A IUTJ AG AG B:G DG EG HG IG JG
0214                        L C555 A IUTJ AG AG B:G DG EG HG IG JG
0221                     L C555 A EU IUTJ AG AG B:G DG HG IG *
0206                                          GR C:G DO1VDY
0205                                          GR C:G DO1VDY
0207                                          GR C:G DD1VO1X&&1Y
0193                                    T66 BOVJ D:G E IOPS& D2&02
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0200                                  QV1OR BG D:G EG
0214                      L C555 A IUTJ AG AG BG D:G EG HG IG JG
0210                      L C555 A IUTJ AG AG BG D:G EG HG IG JG
0209                      L C555 A IUTJ AG AG BG D:G EG HG IG JG
0221                   L C555 A EU IUTJ AG AG BG D:G HG IG *
0209                   L C555 A IUTJ AG AG BG DG E:G HG IG JG
0214                   L C555 A IUTJ AG AG BG DG E:G HG IG JG
0210                   L C555 A IUTJ AG AG BG DG E:G HG IG JG
0221                L C555 A EU IUTJ AG AG BG DG H:G IG *
0214                L C555 A IUTJ AG AG BG DG EG H:G IG JG
0210                L C555 A IUTJ AG AG BG DG EG H:G IG JG
0209                L C555 A IUTJ AG AG BG DG EG H:G IG JG
0208                L D5 C555 A D- EU JUTJ AG AG B:G IG JG KG
0214             L C555 A IUTJ AG AG BG DG EG HG I:G JG
0210             L C555 A IUTJ AG AG BG DG EG HG I:G JG
0209             L C555 A IUTJ AG AG BG DG EG HG I:G JG
0216             T E3 D5 C555 A D- EO KUTJ AG AG B:G JG K*
0217             T E3 D5 C555 A D- EO KUTJ AG AG B:G JG K*
0208             L D5 C555 A D- EU JUTJ AG AG BG I:G JG KG
0216          T E3 D5 C555 A D- EO KUTJ AG AG BG J:G K*
0217          T E3 D5 C555 A D- EO KUTJ AG AG BG J:G K*
0208          L D5 C555 A D- EU JUTJ AG AG BG IG J:G KG
0196                                    L6TJ-/:G 6
0195                                    L6TJ-/:G 6
0197                                    L6TJ-/:G 6
0198                                    L6TJ-/:G 6
0194                                    L6TJ-/:G 6
0569                                         .M:G..G2
0570                                         .M:G..S-04
0191                                   GXGGR D:G&R DG
0031                                          :G-AS-G1
0017                                          :G-AS-G2
0008                                          :G-AS-R&R
0014                                  G1U1-AS-:GG
0064                                      WNXG:GG
0190                                       QVX:GG
0327                                     GXGGXG:GG
0323                                       GYGY:GG
0828                                         GY:GG
0755                                      GYGUY:GG
0734                                       VHXG:GG
0684                                         GXG:GG
0686                                         GXG:GG
0685                                         GXG:GG
0687                                            :GG
0684                                          GX:GGG
0685                                          GX:GGG
0686                                          GX:GGG
0734                                         VHX:GGG
0327                                       GXGGX:GGG
0064                                         WNX:GGG
0213                                   1OR DYX:GGGR DO1
0191                                         GX:GGR DG&R DG
0213                                  1OR DYXG:GGR DO1
0006                                         GX:GGVG
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0327                                    GX:GGXGGG
0313                                    GX:GGYQPO&O1&O1
0855                             Z4YZVQ &:GH
0836                                    :GH
0869                          QVYZ3MYZUM &:GH
0864                     T5M CNJ O1YZVQ &:GH
0697                                    :GH
0574                                    :GH
0575                                    :GH
0707                                    :GR
0206                                    :GR CG OO1VOY
0205                                    :GR CG DO1VOY
0207                                    :GR CG DO1VO1X&&1Y
0191                                 GXG:GR OG&R OG
0213                              1OR DYXGG:GR OO1
0312                                    :GR DSWOR DG
0505                                    :GR DSWOR OG
0718                                    :GSG
0755                                  GY:GUYGG
0723                                  GY:GU1G
0316                                  GY:GU1G
0006                                 GXG:GVG
0713                                    :GVG
0685                                    :GXGGG
0686                                    :GXGGG
0684                                    :GXGGG
0327                                 GXG:GXGGG
0191                                    :GXGGR OG&R DG
0006                                    :GXGGVG
0327                                    :GXGGXGGG
0313                                    :GXGGYQPO&O1&O1
0323                                  GY:GYGG
0828                                    :GYGG
0755                                    :GYGUYGG
0723                                    :GYGU1G
0316                                    :GYGU1G
0323                                    :GYGYGG
0313                                 GXG:GYQPO&O1&O1
0311                                    :GY1U1G
0031                              G-AS-:G1
0701                                    :G1
0702                                    :G1G
0679                                    :G1R
0042                                    :G1R
0894                                    :G1R
0014                                    :G1U1-AS-GG
0908                                    :G1U1G -T
0015                                    :G1VR
0253                                    :G1VR
0103                                    :G1Y&OY1G
0657                                    :G1Y&OY1G
0569                              .MG..:G2
0448                              .CA..:G2
0449                              .CA..:G2
0454                              .8E..:G2
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0017          G-AS-:G2
0011               :G2G
0068               :G2G
0996               :G2G
0596               :G2G
0658               :G2O2G
0012               :G2S2G
0255               :G2S2G
0114               :G2U1
0672               :G2U1 ──────────────────────────────── IODO COMPOUNDS
0539          .NA..:I
1092            IYI:I
0567             .L:I..G
1092             IY:II
1092               :IYII ──────────────────────────────── POTASSIUM SALTS
0513              .:KA..G
0514              .:KA..G
0532       2SPWS2 &-:KA-
0442     QVYQYQVO &-:KA-
0300     QVYQYQVO &-:KA-
0318     1Y&SPWSY &-:KA- ──────────────────────────────── CARBOCYCLIC
0558               :L B677 MV&T&J CO1 DO1 EO1 JMV1 NO1      DERIVATIVES
0221               :L C555 A EU IUTJ AG AG BG DG HG IG *
0214               :L C555 A IUTJ AG AG PG DG EG HG IG JG
0210               :L C555 A IUTJ AG AG BG DG EG HG IG JG
0209               :L C555 A IUTJ AG AG BG DG EG HG IG JG
0208               :L D5 C555 A D- EU JUTJ AG AG BG IG JG KG
0280               :L-15-VTJ
0612               :L-15-VTJ
1090               :L-15-VTJ C
0969               :L35 DYTJ AY DU1
0183               :L46 A EUTJ A A E
0182               :L46 A EYTJ A A EU1
0319               :L46 ATJ-/G # &&
0162               :L49 EY HUTJ B B EU1 I
1016               :L5TJ AOV1
1186               :L5VVTJ C
0987               :L55 ATJ A A B CQ
0199               :L55 ATJ-/G # &&
0994               :L57 GUTJ AQ BY E H
0571               :L6OTJ BQ CQ DQ F1Q EO- BT6OTJ CQ DQ FQ*
0447               :L6OTJ BQ CQ DQ F1Q EO- BT6OTJ CQ DQ FQ*
0320               :L6TJ ANW ──────────────────────── Cyclohexyl
0324               :L6TJ AQ
0310               :L6TJ XG XG
0314               :L6TJ XNO XG
0196               :L6TJ-/G 6
0194               :L6TJ-/G 6
0195               :L6TJ-/G 6
0198               :L6TJ-/G 6
0197               :L6TJ-/G 6 ──────────────────────── Cyclohexenyl
0345               :L6UTJ A B1U1V1 C C
0347               :L6UTJ A B1U1V1 C C
0090               :L6UTJ A B1U1V1 C C
0971               :L6UTJ A DXQ
```

0972	:L6UTJ A DXQ	
1173	:L6UTJ A DYU1	
1056	:L6UTJ A E E F1U1V1	
0414	:L6UTJ A E E F1U1V1	
0410	:L6UTJ A E E F1U1V1	
1067	:L6V CVTJ E E	
1070	:L6VTJ	
0647	:L6VTJ BY E	
0970	:L6Y CUTJ AUY D	
0607	:L66 CV AUTJ E F HYU1	
0610	:L66 CV AUTJ E F HYU1	
0608	:L66 CV AUTJ E F HYU1	
0602	:L66 CV AUTJ E F HYU1	
0609	:L66 CV AUTJ E F HYU1	
0604	:L66 CV AUTJ E F HYU1	
0611	:L66 CV AUTJ E F HYU1	
0603	:L66 CV AUTJ E F HYU1	
0606	:L66 CV AUTJ E F HYU1	
0605	:L66 CV AUTJ E F HYU1	
0659	:L66&TJ	
0662	:L66J	
0133	:L66J CQ	
0872	QVYZ3MYZU:M	IMINO AND IMIDO COMPOUNDS (CYCLIC AND ACYCLIC)
0869	QVYZ3MYZU:M &GH	
0868	T5:M CNJ D1YZVQ	
0864	T5:M CNJ D1YZVQ &GH	
0569	.:MG..G2	MAGNESIUM COMPOUNDS
0570	.:MG..S-O4	
0009	T C666 B-AS- I:MJ BG	IMIDO, CONTINUED
1195	T5:MJ BVH E	
1197	T5:MJ BV1	
0073	T56 B:MJ D	
0237	T56 B:MJ D	
1085	T56 B:MJ D	
0875	T56 B:MJ D1YZVQ	
0817	SUYZ:MR	
0445	SUYZ:MR	
0861	T5:MTJ BVQ	
0854	T5:MTJ BVQ DQ	
0487	T56 BSW:MVJ	
0479	T56 BSW:MVJ	
0814	T56 BSW:MVJ	
0558	L B677 MV&T&J CO1 DO1 EO1 J:MV1 NO1	
0872	QVYZ3:MYZUM	
0869	QVYZ3:MYZUM &GH	
0129	1:M1	
0673	1:M1	
1176	T5:N CSJ B1Y	COMPOUNDS CONTAINING HYDROGEN-FREE NITROGEN (PYRIDINES, PYRIMIDINES, ETC.)
0486	T56 B:N DN FNVNVJ B F H	
0484	T56 B:N DN FNVNVJ B F H	
0475	T56 B:N DN FNVNVJ B F H	
0485	T56 B:N DN FNVNVJ B F H	
0482	T56 B:N DN FNVNVJ B F H	
0476	T56 B:N DN FNVNVJ B F H	
0460	T56 B:N DN FNVNVJ B F H	

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045B   T56 B:N DN FNVNVJ B F H
0459   T56 B:N DN FNVNVJ B F H
0503   T56 B:N DN FNVNVJ B F H
0502   T56 B:N DN FNVNVJ B F H
D497   T56 B:N DN FNVNVJ B F H
0095   T56 B:N DN FNVNVJ B F H
1121      T6:N DNJ B
1122      T6:N DNJ B
1130      T6:N DNJ B C E
1129      T6:N DNJ B C E
1134      T6:N DNJ B C E F
1133      T6:N DNJ B C E F
1135      T6:N DNJ B C2 E
1136      T6:N DNJ B C2 E
1123      T6:N DNJ B E
1124      T6:N DNJ B E
1126      T6:N DNJ B F
1125      T6:N DNJ B F
0795      T6:N DNJ BO1 C1Y
1127      T6:N DNJ B2
1128      T6:N DNJ B2
1132      T6:N DNJ B2 C
1131      T6:N DNJ B2 C
1137      T6:N DNJ B2 C E
113B      T6:N DNJ B2 C E
1139      T6:N DNJ B5
1140      T6:N DNJ B5
0503 T56 BN D:N FNVNVJ B F H
0502 T56 BN D:N FNVNVJ B F H
0460 T56 BN D:N FNVNVJ B F H
0459 T56 BN D:N FNVNVJ B F H
D458 T56 BN D:N FNVNVJ B F H
0497 T56 BN D:N FNVNVJ B F H
04B4 T56 BN D:N FNVNVJ B F H
04B2 T56 BN D:N FNVNVJ B F H
04B5 T56 BN D:N FNVNVJ B F H
0476 T56 BN D:N FNVNVJ B F H
D475 T56 BN D:N FNVNVJ B F H
04B6 T56 BN D:N FNVNVJ B F H
0095 T56 BN D:N FNVNVJ B F H
0521        .:NA..E
0537        .:NA..F
0522        .:NA..G
0527        .:NA..G
D523        .:NA..G
0519        .:NA..G
052D        .:NA..G
052B        .:NA..G
0530        .:NA..G
0529        .:NA..G
0525        .:NA..G
0524        .:NA..G
D526        .:NA..G
0096        .:NA..G
DD97        .:NA..G
```

SODIUM COMPOUNDS

COMPOUNDS CONTAINING HYDROGEN-FREE NITROGEN, CONTINUED

0539 .:NA..I
0538 .:NA..Q
0533 OV1OR 8G DG &-:NA-
0815 T56 BSWNVJ &-:NA-
0317 QV1OR 8G DG &-:NA-
0867 QVYZ1VO &-:NA-
0866 QVYZ2VO &-:NA-
0003 :NC-AS-R&R
0067 :NCG
0074 :NCH
0072 :NCS1
0251 :NCS1
0069 :NCS2
0113 :NC1U1
0671 :NC1U1
0715 T6:NJ
0124 T6:NJ
0125 T66 B:NJ
0045 T6:NJ
0236 T6:NJ
0427 T6:NJ
0917 T6:NJ
0963 T6:NJ
1087 T6:NJ
1185 T5:NJ A2 BVH
1121 T6N D:NJ B
1122 T6N D:NJ B
1130 T6N D:NJ B C E
1129 T6N D:NJ B C F
1133 T6N D:NJ 8 C E F
1134 T6N D:NJ 8 C E F
1135 T6N D:NJ B C2 E
1136 T6N D:NJ 8 C2 E
1124 T6N D:NJ B E
1123 T6N D:NJ B E
0108 T6:NJ B E1U1
0109 T6:NJ B E2
0661 T6:NJ 8 E2
1126 T6N D:NJ B F
1125 T6N D:NJ B F
0795 T6N D:NJ BO1 C1Y
1127 T6N D:NJ B2
1128 T6N D:NJ B2
1131 T6N D:NJ 82 C
1132 T6N D:NJ B2 C
1138 T6N D:NJ B2 C E
1137 T6N D:NJ B2 C E
1139 T6N D:NJ 85
1140 T6N D:NJ B5
0573 T6:NJ C- BT5NTJ A
0572 T6:NJ C- BT5NTJ A
0868 T5M C:NJ D1YZVQ
0864 T5M C:NJ D1YZVQ &GH
0085 T66 B:NJ HO1 EYQ- DT66 A 8 CNTJ A1U*
0500 T66 B:NJ HO1 EYQ- DT66 A 8 CNTJ A1U*

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0499  T66 B:NJ HO1 EYQ- DT65 A B CNTJ A1U*
0501  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U*
0477  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U*
0494  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U*
0516  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1
0515  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1
0517  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
0504  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
0495  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
0496  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
047B  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
0093  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
0092  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
0420  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
1116  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
1117  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
1115  T66 B:NJ HO1 EYQ- DT66 A B CNTJ A1U1*
0511  T66 B:NJ HO2 EYQ- DT66 A B C*
0219  T66 B:NNNVJ C1SPS&01&01
0453     T5:NNVJ A BR& E
0219 T66 BN:NNVJ C1SPS&01&01
0509      W:NQ
0759      W:NR
0708      W:NR
0250     SC:NR
0271      C:NR
0B29      C:NR
0060      W:NR
0030      C:NR
0029     SC:NR
1077      C:NR
1071     SC:NR
1076      C:NR
0925      C:NR
0964     SC:NR
0915      W:NR
0919      C:NR
0962      W:NR
091B     SC:NR
0394      W:NR B CNW ENW DX
0392      W:NR B CNW ENW DX
0391      W:NR B CNW ENW DX
0393      W:NR B CNW ENW DX
0425      W:NR B CNW ENW DX
0441      W:NR B CNW ENW DX
0440      W:NR B D CNW ENW FX
1096      W:NR B D CNW ENW FX
109B      W:NR B D CNW ENW FX
002B      W:NR B D CNW ENW FX
0957      W:NR B D CNW ENW FX
0906      W:NR B D CNW ENW FX
0510      W:NR BQ
0444      W:NR BQ CNW ENW
0722     OC:NR D
0203      W:NR DOPS&01&01
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0211                                          W:NR DDPS&02&D2
0218                                          W:NR DDPS&R&D2
0572                                  T6NJ C- BT5:NTJ A
0573                                  T6NJ C- BT5:NTJ A
0557                                      T56 A A:NTJ A FVD1 GVDR
0450                                      T56 A A:NTJ A GDVYR&1Q
0501                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U*
0500                        T66 8NJ HO1 EYQ- DT66 A B C:NTJ A1U*
0499                        T66 BNJ HO1 EYQ- DT66 A B C:NTJ A1U*
0477                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U*
0494                        T66 8NJ HO1 EYQ- DT66 A B C:NTJ A1U*
0085                        T66 BNJ HO1 EYQ- DT66 A B C:NTJ A1U*
0516                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U1
0515                        T66 BNJ HO1 EYQ- DT66 A B C:NTJ A1U1
0504                        T66 BNJ HO1 EYQ- DT66 A B C:NTJ A1U1*
0517                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U1*
0478                        T66 BNJ HD1 FYQ- DT66 A B C:NTJ A1U1*
0495                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U1*
0496                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U1*
0093                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U1*
0092                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U1*
0420                        T66 BNJ HO1 EYQ- DT66 A B C:NTJ A1U1*
1117                        T66 BNJ HO1 EYQ- DT66 A B C:NTJ A1U1*
1115                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U1*
1116                        T66 BNJ HD1 EYQ- DT66 A B C:NTJ A1U1*
0331                                          Q:NU9
0542                T6 G656 B7 C6 E5 D 5ABCEF A& FX M:NV*
0815                                      T56 BSW:NVJ &-NA-
0453                                          T5N:NVJ A BR& E
0460                                T56 BN DN FNV:NVJ B F H
0458                                T56 BN DN FNV:NVJ B F H
0459                                T56 BN DN FNV:NVJ B F H
0502                                T56 BN DN FNV:NVJ B F H
0503                                T56 BN DN FNV:NVJ B F H
0486                                T56 BN DN FNV:NVJ B F H
0485                                T56 BN DN FNV:NVJ B F H
0497                                T56 BN DN FNV:NVJ B F H
0482                                T56 BN DN FNV:NVJ B F H
0475                                T56 BN DN FNV:NVJ B F H
0484                                T56 BN DN FNV:NVJ B F H
0476                                T56 BN DN FNV:NVJ B F H
0095                                T56 BN DN FNV:NVJ B F H
0219                                      T66 BNN:NVJ C1SPS&D1&01
0095                                  T56 BN DN F:NVNVJ B F H
0476                                  T56 BN DN F:NVNVJ B F H
0482                                  T56 BN DN F:NVNVJ B F H
0497                                  T56 BN DN F:NVNVJ B F H
0485                                  T56 BN DN F:NVNVJ B F H
0486                                  T56 BN DN F:NVNVJ B F H
0475                                  T56 BN DN F:NVNVJ B F H
0484                                  T56 BN DN F:NVNVJ B F H
0503                                  T56 BN DN F:NVNVJ B F H
0502                                  T56 BN DN F:NVNVJ B F H
0458                                  T56 BN DN F:NVNVJ B F H
0460                                  T56 BN DN F:NVNVJ B F H
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0459   T56 BN DN F:NVNVJ B F H
0444  WNR BQ CNW E:NW
0320       L6TJ A:NW
0394   WNR B CNW E:NW DX
0392   WNR B CNW E:NW DX
0393   WNR B CNW E:NW DX
0391   WNR B CNW E:NW DX
0425   WNR B CNW E:NW DX
0441   WNR B CNW E:NW DX
0444      WNR BQ C:NW ENW
0441       WNR B C:NW ENW DX
0393       WNR B C:NW ENW DX
0392       WNR B C:NW ENW DX
0391       WNR B C:NW ENW DX
0425       WNR B C:NW ENW DX
0394       WNR B C:NW ENW DX
0028     WNR B D C:NW ENW FX
0906     WNR B D C:NW ENW FX
0957     WNR B D C:NW ENW FX
0440     WNR B D C:NW ENW FX
1096     WNR B D C:NW ENW FX
109B     WNR B D C:NW ENW FX
1098  WNR B D CNW E:NW FX
1096  WNR B D CNW E:NW FX
0440  WNR B D CNW E:NW FX
0957  WNR B D CNW E:NW FX
0906  WNR B D CNW E:NW FX
002B  WNR B D CNW E:NW FX
1079            C:NX
107B            C:NX
0064            W:NXGGG
0B33           SC:N1
1074            C:N1
1072            C:N1
1075            C:N1
1073            C:N1
0106            1:N1&1
06BB           1V:N1&1
0675            1:N1&1
024B           SC:N2
0257           SC:N2U1
0270            C:N2U1
0262           SC:N2U1
0056           SC:N2U1
0019            C:N2U1
0883            C:N2U1
0B84           SC:N2U1
0935           SC:N2U1
0931            C:N2U1
1069           SC:N2U1
0002           OO:O
0304          QSQ:O
0556          Q5Q:O
0719           OS:O
0442       QVYQYQV:O &-KA-
```

Nitro compounds (NW)

Other hydrogen-free nitrogen compounds

COMPOUNDS CONTAINING HYDROGEN-FREE OXYGEN (CYCLIC AND ACYCLIC ETHERS, ETC.)

```
0300                                QVYQYQV:O &-KA-
0866                                 QVYZ2V:O &-NA-
0867                                 QVYZ1V:O &-NA-
1063                               T56 BO D:O CHJ GVH
0428                               T56 BO D:O CHJ G2U1
0518                               T56 BO D:O CHJ G2U1
0645                               T56 BO D:O CHJ G2U1
0308                                     T6:O COTJ D D
1063                                  T56 B:O DO CHJ GVH
0428                                  T56 B:O DO CHJ G2U1
0645                                  T56 B:O DO CHJ G2U1
0518                                  T56 B:O DO CHJ G2U1
0192                                     T6:O DOTJ B- C-/SPS&02&02 2
1099                                     T6:O DVJ B CQ
1201                                     T6:O DVTJ B CQ EQ
0217                T E3 D5 C555 A D- F:O KUTJ AG AG BG JG K*
0216                T E3 D5 C555 A D- F:O KUTJ AG AG BG JG K*
0212                  T G5 D6 B666 CV H:O MO POT&TT&J IYU1 S*
0212               T G5 D6 B666 CV HO M:O POT&TT&J IYU1 S*
0314                            L6TJ XN:O XG
0313                            GXGGYQP:O&O1&O1
0322                              2S2SP:O&O1&O1 &&
0307                               1SPQ:O&S1
0309                               2SPQ:O&S2
0302               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0848               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0099               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0100               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0547               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0548               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0498               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0550               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0553               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0552               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0551               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0549               T6OTJ B1Q CQ DQ EQ F:O- BT5OTJ B1Q CQ D*
0561                     T66 BOVJ IQ H:O- BT6OTJ CQ DQ EQ F1Q
0571               L6OTJ BQ CQ DQ F1Q E:O- BT6OTJ CQ DQ EQ*
0447               L6OTJ BQ CQ DQ F1Q E:O- BT6OTJ CQ DQ FQ*
0722                               :OCNR D
1223                              T5:OJ B
1192                              T5:OJ BVH
1175                              T5:OJ BVH
1187                              T5:OJ BVH E
1199                              T5:OJ BVH E1Q
1196                              T5:OJ BV1
1198                              T5:OJ BV1Q
1190                              T5:OJ B1Q
1228                              T5:OJ B1U1
1224                              T5:OJ B2
1225                              T5:OJ B3
1226                              T5:OJ B4
1227                              T5:OJ B5
0382                              T5:OJ B5
1027                              T5:OJ B5
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0002                                      0:00
0002                                       :000
0193                       T66 BOVJ DG E I:OPS& 02&02
0203                                 WNR D:OPS&01&01
0211                                 WNR D:OPS&02&02
0218                                 WNR D:OPS&R&02
0202                                    QVY:OR
0269                                      R:OR
0907                                      R:OR
0956                                      R:OR
0691                                      R:OR
0557                 T56 A ANTJ A FVO1 GV:OR
0215                                    QV1:OR BG DG
0317                                    QV1:OR BG DG &-NA-
0533                                    OV1:OR BG DG &-NA-
0200                                    QV1:OR BG DG EG
0594                                      1:OR BQ CO1
0593                                      1:OR BQ CO1
0595                                      1:OR BQ CO1
0505                                 GR DSW:OR DG
0312                                 GR DSW:OR DG
0451                               T6OTJ B:OR DQ& CQ DQ EQ F1Q
0213                                      1:OR DYXGGGR DO1
0719                                       :OSO
0212           T G5 D6 B666 CV HO MO P:OT&TT&J IYU1 S*
0995                             T66 A B A:OTJ B B F
0641                             T66 A B A:OTJ B B F
0192                                  T60 D:OTJ B- C-/SPS&02&02 2
0451                                     T6:OTJ BOR DQ& CQ DQ EQ F1Q
0563                                     T5:OTJ BQ B1Q CQ DQ E1Q
0285                                     T5:OTJ BQ B1Q CQ DQ E1Q
0037                                     T5:OTJ BQ B1Q CQ DQ E1Q
0B47                                     T6:OTJ BQ CQ DQ EQ F1Q
0837                                     T6:OTJ BQ CQ DQ EQ F1Q
0286                                     T6:OTJ BQ CQ DQ EQ F1Q
0564                                     T6:OTJ BQ CQ DQ EQ F1Q
0571                                     L6:OTJ BQ CQ DQ F1Q FO- BT6OTJ CQ DQ EQ*
0447                                     L6:OTJ BQ CQ DQ F1Q EO- BT6OTJ CQ DQ EQ*
0547        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0548        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
049B        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0550        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0549        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0551        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0552        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0553        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0B48        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0100        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0099        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0302        T6OTJ B1Q CQ DQ EQ FO- BT5:OTJ B1Q CQ D*
0302                                     T6:OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
0099                                     T6:OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
0100                                     T6:OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
0848                                     T6:OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
0553                                     T6:OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
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0549                                T6:OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0552                                T6:OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0550                                T6:OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0551                                T6:OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0498                                T6:OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0548                                T6:OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0547                                T6:OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0561                  T66 BOVJ IQ HO- BT6:OTJ CQ OQ EQ F1Q
0571          L6OTJ BQ CQ OQ F1Q EO- BT6:OTJ CQ OQ EQ*
0447          L6OTJ BQ CQ OQ F1Q EO- BT6:OTJ CQ OQ EQ*
0308                               T6O C:OTJ O O
0264                               T66 B:OVJ
0065                               T66 B:OVJ
0949                               T66 B:OVJ
0904                               T66 B:OVJ
0559                               T66 B:OVJ
0807                               T66 B:OVJ
0806                               T66 B:OVJ
0808                               T66 B:OVJ
0193                               T66 B:OVJ DG E IOPS& O2&O2
0561                               T66 B:OVJ IQ HO- BT6OTJ CQ OQ EQ F1Q
0383                                   2:OVR
0560                          QVR CQ OQ E:OVR CQ DQ EQ
0640                                T-18-:OVTJ
1200                                   T5:OVTJ
1189                                   T6:OVTJ CQ
0756                                   T5:OVTJ E2
0751                                   T5:OVTJ E3
0752                                   T5:OVTJ E4
0601                                   T5:OVTJ E4
0652                                   T5:OVTJ E5
0753                                   T5:OVTJ E5
1030                                   T5:OVTJ E5
1043                                   T5:OVTJ E6
0622                                   T5:OVTJ E6
0758                                   T5:OVTJ E7
0757                                   T6:OVTJ F3
0279                                   T6:OVTJ F4
0274                                   T6:OVTJ F5
0035                                   T6:OVTJ F5
0694                                   T6:OVTJ F5
0599                                   T6:OVTJ F6
0618                                   T6:OVTJ F7
1044                                   T6:OVTJ F7
0746                                   T6:OVTJ F9
0159                                    6:OVY
0157                                  2Y&1:OVY
0188                                    7:OVY
0178                                    8:OVY
0450                          T56 A ANTJ A G:OVYR&1Q
0455                                   2:OV1
0443                                   2:OV1
0761                                   2:OV1
0637                                   2:OV1
0634                                   2:OV1
```

0581	6:OV1
0586	4:OV1
0585	2Y1:OV1
0187	8:OV1
0294	2:OV1
0276	2:OV1
0265	1Y2:OV1
0104	5:OV1
0023	2:OV1
0053	5:OV1
0436	2:OV1
0431	5:OV1
0424	QVR B:OV1
0432	5:OV1
0843	2:OV1
0377	2Y2&:OV1
0373	1Y&Y:OV1
0376	1X:OV1
0344	5:OV1
0372	2Y1:OV1
0371	5:OV1
0378	3Y:OV1
0343	5:OV1
0374	1Y1:OV1
0375	2X:OV1
1016	L5TJ A:OV1
1024	5:OV1
0889	1Y2:OV1
0936	1Y2:OV1
0186	1Y&U3YU2:OV1 -T
0533	:OV1OR BG DG &-NA-
1181	2:OV1R
0693	2:OV1U1
0101	2:OV1U1
1057	2:OV1U1R
1060	2:OV1V1
0937	1Y&2:OV1Y
0890	1Y&2:OV1Y
0266	1Y&2:OV1Y
0830	5:OV1Y
0220	2:OV1YVO2&SPS&O1&O1
0181	6:OV2
0160	7:OV2
1022	6:OV2
0583	4:OV2
0587	3:OV2
1062	5:OV3
0052	5:OV4
0597	5:OV4
0206	GR CG DO1V:OY
0205	GR CG DO1V:OY
0103	G1Y&:OY1G
0657	G1Y&:OY1G
0650	QR BV:O1
0653	2U1R D:O1

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0649                                    QR D B:01
0598                                   VHR DQ C:01
0593                                   1OR BQ C:01
0595                                   1OR BQ C:01
0594                                   1OR BQ C:01
0749                                       1UYV:01
0742                                     ZR BV:01
1100                                    QR O B:01
1101                                    QR O B:01
0B00                                   VHR OQ C:01
0769                                     QR BV:01
076B                                     QR BV:01
0B02                                   VHR DQ C:01
0B01                                   VHR OQ C:01
0642                                        QR B:01
0643                                        QR B:01
0644                                        QR B:01
0154                                       6U3V:01
0153                                     2U4U3V:01
0049                                     ZR BV:01
0076                                   VHR OQ C:01
0203                                WNR DOPS&O1&:01
01B9                                        6V:01
0213                               1OR DYXGGGR D:01
0249                                   VHR OQ C:01
0220                          2OV1YVO2&SPS&O1&:01
0219                        T66 BNNNVJ C1SPS&O1&:01
0313                           GXGGYQPO&O1&:01
02B4                                    QR BV:01
0433                                    QR BV:01
043B                                   VHR OQ C:01
0434                                    QR BV:01
1020                                     4U5V:01
0913                                    ZR BV:01
0981                                   2U1R D:01
0980                                   2U1R D:01
0960                                    ZR BV:01
10B2                                   VHR OQ C:01
055B  L B677 MV&T&J CO1 DO1 EO1 JMV1 N:01
0322                              2S2SPO&O1&:01 &&
0795                               T6N ONJ B:01 C1Y
055B                     L B677 MV&T&J C:01 DO1 EO1 JMV1 NO1
0558                   L B677 MV&T&J CO1 D:01 EO1 JMV1 NO1
0499                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U*
0500                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U*
0494                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U*
0501                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U*
0477                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U*
00B5                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U*
0516                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U1
0515                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U1
0504                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U1*
0517                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U1*
0495                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U1*
0496                              T66 BNJ H:01 EYQ- DT66 A B CNTJ A1U1*
```

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0478                    T66 BNJ H:O1 EYQ- DT66 A B CNTJ A1U1*
0093                    T66 BNJ H:D1 EYQ- DT66 A B CNTJ A1U1*
0092                    T66 BNJ H:D1 EYQ- DT66 A B CNTJ A1U1*
0420                    T66 BNJ H:O1 EYQ- DT66 A B CNTJ A1U1*
1115                    T66 BNJ H:O1 EYQ- DT66 A B CNTJ A1U1*
1116                    T66 BNJ H:D1 EYQ- DT66 A B CNTJ A1U1*
1117                    T66 BNJ H:O1 EYQ- DT66 A B CNTJ A1U1*
0557              T56 A ANTJ A FV:D1 GVDR
0558  L B677 MV&T&J CQ1 DO1 E:D1 JMV1 NO1
0313                    GXGGYQPD&:D1&O1
0220                2DV1YVO2&SPS&:O1&D1
0219          T66 BNNNVJ C1SPS&:O1&O1
0203                    WNR DDPS&:D1&O1
0322                      2S2SPD&:O1&D1 &&
0205                      GR CG D:D1VDY
0206                      GR CG D:D1VDY
0207                      GR CG D:D1VO1X&&1Y
0207                    GR CG DD1V:D1X&&1Y
0152                         1Y&V:O1Y
0156                       2Y&1V:D1Y2
0155                         3V:D1Y2
0193  T66 BDVJ DG E IQPS& O2&:O2
0211                 WNR DDPS&O2&:O2
0218                  WNR DOPS&R&:O2
0306                         5V:D2
0339                         3V:D2
0337                         7V:O2
0315                         3V:O2
0338                         5V:O2
0336                         4V:O2
0395                          2:O2
0396                          2:D2
1064                         3V:O2
1059                         4V:O2
0580                         4V:D2
0591                         6V:O2
0582                         3V:D2
0623                         3V:O2
0646                         7V:O2
0636                         7V:O2
0760                         3V:O2
0811                    2U1R CQ D:O2
0B03                     VHR DQ C:D2
0B05                     VHR DQ C:D2
0765                          5V:O2
0809                    2U1R CQ D:D2
0B27                          2:O2
0804                     VHR DQ C:D2
0790                        2YV:O2
0B10                    2U1R CQ D:D2
1097                          2:O2
11B0                        QYV:O2
0511                    T66 BNJ H:D2 EYQ- DT66 A B C*
0192   T6D DDTJ B- C-/SPS&D2&:O2 2
0211                    WNR DDPS&:D2&O2
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0192	T60 DOTJ B- C-/SPS&:O2&O2 2	
0220	2OV1YV:O2&SPS&O1&O1	
0658	G2:O2G	
0184	1Y&V:O2UY&3UY -T	
0185	2V:O2UY&3UY -T	
0584	3V:O3	
0570	.MG..S-:O4	PHOSPHORUS COMPOUNDS
0714	:PHHH	
0313	GXGGYQ:PO&O1&O1	
0322	2S2S:PO&O1&O1 &&	
0307	1S:PQO&S1	
0309	2S:PQO&S2	
0193	T66 BOVJ DG E IO:PS& O2&O2	
0203	WNR DO:PS&O1&O1	
0220	2OV1YVO2&S:PS&O1&O1	
0219	T66 BNNNVJ C1S:PS&O1&O1	
0211	WNR DO:PS&O2&O2	
0192	T60 DOTJ B- C-/S:PS&O2&O2 2	
0218	WNR DO:PS&R&O2	
0318	1Y&S:PWSY &-KA-	
0532	2S:PWS2 &-KA-	HYDROXYL COMPOUNDS (ALCOHOLS)
0538	.NA..:Q	
0546	QV2V:Q	
0512	QVV:Q	
0510	WNR B:Q	
0509	WN:Q	
0545	QV2V:Q	
0492	QYV:Q	
0493	QVYQYQV:Q	
0490	QV1XQVQ1V:Q	
0481	Q1YQ1:Q	
0473	QVYQYQV:Q	
0480	VH:Q	
0474	QVYQYQV:Q	
0489	QV1XQVQ1V:Q	
0491	QVYQ2V:Q	
0468	QVYQYQV:Q	
0467	QVYQYQV:Q	
0450	T56 A ANTJ A GOVYR&1:Q	
0471	QV1XQVQ1V:Q	
0465	QVYQ1V:Q	
0451	T6OTJ BOR DQ& CQ DQ EQ F1:Q	
0466	QYV:Q	
0463	QV1XQVQ1V:Q	
0470	QVYQYQV:Q	
0469	QVYQYQV:Q	
0472	QV1XQVQ1V:Q	
0464	QVYQYQV:Q	
1189	T6OVTJ C:Q	
1099	T6O DVJ B C:Q	
1190	T5OJ B1:Q	
0563	T5OTJ BQ 81Q CQ DQ E1:Q	
0564	T6OTJ BQ CQ DQ EQ F1:Q	
0554	WSQ:Q	
0560	QVR CQ DQ EQVR CQ DQ E:Q	

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0555                                    WSQ:Q
0565                                  QVYZ2V:Q
0566                                  QVYZ2V:Q
0639                                     VH:Q
1198                                T5OJ BV1:Q
1201                          T6O DVTJ 8 CQ 5:Q
0286                       T6OTJ BQ CQ DQ EQ F1:Q
0285                    T5OTJ BQ 81Q CQ OQ E1:Q
1199                          T5OJ 8VH E1:Q
0349                                     VH:Q
0351                                     VH:Q
0324                                 L6TJ A:Q
0406                                     VH:Q
0405                                     VH:Q
0853                                     VH:Q
0859                                  ZV2YZV:Q
0857                                     Z1V:Q
0860                                  QY&YZV:Q
0856                                     ZYV:Q
0849                                  QVYQYQV:Q
0845                                     QYV:Q
0861                                  T5MTJ 8V:Q
0852                                     QYV:Q
0839                                  QVYQ1V:Q
0858                                  QVYZ1:Q
0841                                     QYV:Q
0862                                  QVYZ1V:Q
0837                       T6OTJ 8Q CQ OQ EQ F1:Q
0838                                  QVYQYQV:Q
0846                                  QVYQYQV:Q
0854                                T5MTJ BVQ D:Q
0863                                  QVYZ2V:Q
0847                       T6OTJ 8Q CQ OQ EQ F1:Q
0840                                QV1XQVQ1V:Q
0844                                  QVYQ1V:Q
0842                                QV1XQVQ1V:Q
0301                                   QV2V:Q
0293                                  QVYQ1V:Q
0297                                QV1XQVQ1V:Q
0305                                   Q1YQ1:Q
0296                                     QYV:Q
0298                                  QVYQYQV:Q
0303                                    WSQ:Q
0134                                     QYV:Q
0133                                   L66J C:Q
0117                                  QVYQ1V:Q
0110                                     SH2:Q
0087                                QV1XQVQ1V:Q
0094                                QV1XQVQ1V:Q
0086                                  QVYQYQV:Q
0037                    T5OTJ BQ 81Q CQ DQ E1:Q
0044                                QV1XQVQ1V:Q
0041                                  QVYQYQV:Q
0004                                   Q1YQ1:Q
0972                                L6UTJ A DX:Q
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0971                                    L6UTJ A DX:Q
09B7                                 L55 ATJ A A 8 C:Q
0868                                   T5M CNJ D1YZV:Q
0865                                         Z2YZV:Q
0875                                   T56 BMJ D1YZV:Q
1119                                        QV1XQVQ1V:Q
1114                                           QVYQ1V:Q
111B                                        QV1XQVQ1V:Q
1120                                        QV1XQVQ1V:Q
1113                                           QVYQ1V:Q
1112                                           QVYQ1V:Q
0561  T66 80VJ IQ HO- BT60TJ CQ OQ EQ F1:Q
0855                                         Z4YZV:Q &GH
0B64                                   T5M CNJ D1YZV:Q &GH
0994                                      L57 GUTJ A:Q BY E H
0037                                         T50TJ B:Q B1Q CQ OQ E1Q
0563                                         T50TJ 8:Q B1Q CQ OQ E1Q
0285                                         T50TJ B:Q B1Q CQ DQ E1Q
0444                                           WNR B:Q CNW ENW
0594                                           1OR 8:Q CO1
0598                                           VHR D:Q CO1
0595                                           1OR B:Q CO1
0593                                           1OR B:Q CO1
0802                                           VHR D:Q CO1
0B00                                           VHR D:Q CO1
0B01                                           VHR D:Q CO1
0076                                           VHR D:Q CO1
043B                                           VHR D:Q CO1
0249                                           VHR D:Q CO1
10B2                                           VHR D:Q CO1
0B04                                           VHR D:Q CO2
0805                                           VHR O:Q CO2
0803                                           VHR O:Q CO2
0551    T60TJ B1Q CQ OQ EQ FO- BT50TJ B1:Q CQ O*
0553    T60TJ 81Q CQ OQ EQ FO- BT50TJ B1:Q CQ D*
0552    T60TJ B1Q CQ OQ EQ FO- BT50TJ B1:Q CQ D*
049B    T60TJ B1Q CQ DQ EQ FO- BT50TJ B1:Q CQ D*
0548    T60TJ B1Q CQ DQ EQ FO- BT50TJ B1:Q CQ O*
0547    T60TJ B1Q CQ DQ EQ FO- BT50TJ B1:Q CQ D*
0550    T60TJ B1Q CQ DQ EQ FO- BT50TJ B1:Q CQ O*
0549    T60TJ B1Q CQ DQ EQ FO- BT50TJ B1:Q CQ D*
0302    T60TJ 81Q CQ OQ EQ FO- BT50TJ B1:Q CQ D*
084B    T60TJ B1Q CQ OQ EQ FO- BT50TJ B1:Q CQ D*
0099    T60TJ 81Q CQ OQ EQ FO- BT50TJ B1:Q CQ D*
0100    T60TJ B1Q CQ OQ EQ FO- BT50TJ B1:Q CQ O*
0099                                  T60TJ B1:Q CQ DQ EQ FO- BT50TJ B1Q CQ D*
0100                                  T60TJ B1:Q CQ OQ EQ FO- BT50TJ B1Q CQ D*
084B                                  T60TJ B1:Q CQ DQ EQ FO- BT50TJ B1Q CQ O*
0302                                  T60TJ 81:Q CQ DQ EQ FO- BT50TJ 81Q CQ D*
0547                                  T60TJ B1:Q CQ DQ EQ FO- BT50TJ B1Q CQ O*
0550                                  T60TJ B1:Q CQ DQ EQ FO- BT50TJ B1Q CQ D*
0549                                  T60TJ B1:Q CQ OQ EQ FO- BT50TJ 81Q CQ D*
054B                                  T60TJ B1:Q CQ DQ EQ FO- BT50TJ B1Q CQ D*
049B                                  T60TJ B1:Q CQ OQ EQ FO- BT50TJ B1Q CQ O*
0553                                  T60TJ 81:Q CQ OQ EQ FO- BT50TJ B1Q CQ D*
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0551                                    T6OTJ B1:Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
0552                                    T6OTJ 81:Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
0564                                     T6OTJ B:Q CQ DQ EQ F1Q
0286                                     T6OTJ B:Q CQ DQ EQ F1Q
0837                                     T6OTJ B:Q CQ DQ EQ F1Q
0847                                     T6OTJ B:Q CQ DQ EQ F1Q
0037                                 T5OTJ BQ 81:Q CQ DQ E1Q
0285                                 T5OTJ BQ 81:Q CQ DQ E1Q
0563                                 T5OTJ BQ B1:Q CQ DQ E1Q
0571                                     L6OTJ B:Q CQ DQ F1Q EO- BT6OTJ CQ DQ EQ*
0447                                     L6OTJ B:Q CQ DQ E1Q EO- BT6OTJ CQ DQ EQ*
0498   T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q C:Q D*
0550   T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q C:Q D*
0551   T6OTJ B1Q CQ DQ EQ EO- BT5OTJ B1Q C:Q D*
0549   T6OTJ B1Q CQ DQ EQ FO- 8T5OTJ B1Q C:Q D*
0548   T6OTJ B1Q CQ DQ EQ EO- BT5OTJ 81Q C:Q D*
0547   T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q C:Q D*
0552   T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q C:Q D*
0553   T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q C:Q D*
0100   T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q C:Q D*
0099   T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q C:Q D*
0848   T6OTJ B1Q CQ DQ EQ EO- BT5OTJ B1Q C:Q D*
0302   T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q C:Q D*
0809                                 2U1R C:Q DO2
0811                                 2U1R C:Q DO2
0810                                 2U1R C:Q DO2
0854                                T5MTJ BV:Q DQ
0560                                   QVR C:Q DQ EOVR CQ DQ EQ
0560                           QVR CQ DQ EOVR C:Q DQ EQ
0553                                T6OTJ B1Q C:Q DQ EQ FO- BT5OTJ B1Q CQ D*
0552                                T6OTJ B1Q C:Q DQ EQ FO- BT5OTJ B1Q CQ D*
0550                                T6OTJ B1Q C:Q DQ EQ FO- BT5OTJ B1Q CQ D*
0547                                T6OTJ B1Q C:Q DQ EQ FO- BT5OTJ B1Q CQ D*
0549                                T6OTJ B1Q C:Q DQ EQ FO- BT5OTJ B1Q CQ D*
0548                                T6OTJ B1Q C:Q DQ EQ FO- BT5OTJ B1Q CQ D*
0551                                T6OTJ B1Q C:Q DQ EQ EO- BT5OTJ B1Q CQ D*
0498                                T6OTJ B1Q C:Q DQ EQ EO- BT5OTJ B1Q CQ D*
0848                                T6OTJ B1Q C:Q DQ EQ FO- 8T5OTJ 81Q CQ D*
0302                                T6OTJ 81Q C:Q DQ EQ FO- BT5OTJ B1Q CQ D*
0099                                T6OTJ B1Q C:Q DQ EQ FO- BT5OTJ B1Q CQ D*
0100                                T6OTJ B1Q C:Q DQ EQ FO- BT5OTJ B1Q CQ D*
0837                                 T6OTJ BQ C:Q DQ EQ F1Q
0847                                 T6OTJ BQ C:Q DQ EQ F1Q
0451                           T6OTJ BOR DQE C:Q DQ EQ F1Q
0564                                 T6OTJ 8Q C:Q DQ EQ E1Q
0561                     T66 BOVJ IQ HO- 8T6OTJ C:Q DQ EQ F1Q
0286                                 T6OTJ BQ C:Q DQ EQ F1Q
0571   L6OTJ BQ CQ DQ E1Q EO- BT6OTJ C:Q DQ EQ*
0447   L6OTJ BQ CQ DQ F1Q EO- BT6OTJ C:Q DQ EQ*
0563                           T5OTJ BQ B1Q C:Q DQ E1Q
0285                           T5OTJ 8Q B1Q C:Q DQ E1Q
0037                           T5OTJ BQ B1Q C:Q DQ E1Q
0571                               L6OTJ BQ C:Q DQ E1Q EO- BT6OTJ CQ DQ EQ*
0447                               L6OTJ BQ C:Q DQ F1Q EO- BT6OTJ CQ DQ EQ*
0447                         L6OTJ BQ CQ DQ F1:Q EO- BT6OTJ CQ DQ EQ*
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0571                                L6OTJ BQ CQ DQ F1:Q EO- BT6OTJ CQ DQ EQ*
0560                                     QVR CQ D:Q EOVR CQ OQ EQ
0560                               QVR CQ OQ EOVR CQ D:Q EQ
1201                                  T6O OVTJ B C:Q EQ
0553                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0552                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0498                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0548                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0551                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0550                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0549                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0547                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0100                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0099                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0848                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0302                                T6OTJ B1Q CQ D:Q EQ FO- BT5OTJ B1Q CQ D*
0837                                 T6OTJ BQ CQ D:Q EQ F1Q
0847                                 T6OTJ BQ CQ D:Q EQ F1Q
0451                               T6OTJ BOR DQ& CQ D:Q EQ F1Q
0564                                    T6OTJ BQ CQ D:Q EQ F1Q
0286                                    T6OTJ BQ CQ D:Q EQ F1Q
0561                        T66 BOVJ IQ HO- BT6OTJ CQ D:Q EQ F1Q
0571                  L6OTJ BQ CQ OQ F1Q EO- BT6OTJ CQ D:Q EQ*
0447                  L6OTJ BQ CQ DQ F1Q FO- BT6OTJ CQ D:Q EQ*
0563                               T5OTJ BQ B1Q CQ D:Q E1Q
0285                               T5OTJ BQ B1Q CQ D:Q E1Q
0037                               T5OTJ BQ B1Q CQ D:Q E1Q
0100                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0099                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0848                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0302                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0553                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0550                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0551                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0548                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0547                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0549                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0552                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0498                               T6OTJ B1Q CQ DQ E:Q FO- BT5OTJ B1Q CQ D*
0451                            T6OTJ BOR DQ& CQ DQ E:Q F1Q
0564                                 T6OTJ BQ CQ OQ E:Q F1Q
0286                                 T6OTJ BQ CQ OQ E:Q F1Q
0837                                 T6OTJ BQ CQ DQ E:Q F1Q
0847                                 T6OTJ BQ CQ DQ E:Q F1Q
0561                        T66 BOVJ IQ HO- BT6OTJ CQ DQ E:Q F1Q
0571                                  L6OTJ BQ CQ O:Q F1Q EO- BT6OTJ CQ DQ EQ*
0447                                  L6OTJ BQ CQ D:Q F1Q EO- BT6OTJ CQ DQ EQ*
0561                                     T66 BOVJ I:Q HO- BT6OTJ CQ DQ EQ F1Q
0451                                   T6OTJ BOR D:Q& CQ DQ EQ F1Q
0447                  L6OTJ BQ CQ DQ F1Q EO- BT6OTJ CQ DQ E:Q*
0571                  L6OTJ BQ CQ OQ F1Q EO- BT6OTJ CQ DQ E:Q*
0511                                  T66 BNJ HO2 EY:Q- DT66 A B C*
0501                                  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U*
0500                                  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U*
0477                                  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U*
```

```
0499  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U*
0494  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U*
0085  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U*
0515  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1
0516  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1
0517  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
0496  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
0495  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
0478  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
0504  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
0092  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
0093  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
0420  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
1115  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
1117  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
1116  T66 BNJ HO1 EY:Q- DT66 A B CNTJ A1U1*
0331                 :QNU9
0304               QS:QO
0556               Q5:QO
0307             1SP:QO&S1
0309             2SP:QO&S2
0313           GXGGY:QPO&O1&O1
0303              WS:QQ
0554              WS:QQ
0555              WS:QQ
0712                :QR
0123                :QR
1086                :QR
0128                :QR B
0254                :QR BG
0102                :QR BG DG
0644                :QR BO1
0642                :QR BO1
0643                :QR BO1
0768                :QR BVO1
0769                :QR BVO1
0650                :QR BVO1
0284                :QR BVO1
0433                :QR BVO1
0434                :QR BVO1
0127                :QR C
0740                :QR D
1100                :QR D BO1
1101                :QR D BO1
0649                :QR D BO1
0118                :QR DG
0043                :QR XG
1083                :QR XG
0304                :QSQO
0300           QVYQY:QVO &-KA-
0442           QVYQY:QVO &-KA-
0474           QVYQY:QVQ
0470           QVYQY:QVQ
0469           QVYQY:QVQ
0468           QVYQY:QVQ
```

```
0467  QVYQY:QVQ
0464  QVYQY:QVQ
0473  QVYQY:QVQ
0493  QVYQY:QVQ
0298  QVYQY:QVQ
0041  QVYQY:QVQ
0086  QVYQY:QVQ
0846  QVYQY:QVQ
0838  QVYQY:QVQ
0849  QVYQY:QVQ
0842   QV1X:QVQ1VQ
0840   QV1X:QVQ1VQ
0087   QV1X:QVQ1VQ
0094   QV1X:QVQ1VQ
0044   QV1X:QVQ1VQ
0297   QV1X:QVQ1VQ
1120   QV1X:QVQ1VQ
1119   QV1X:QVQ1VQ
1118   QV1X:QVQ1VQ
0489   QV1X:QVQ1VQ
0490   QV1X:QVQ1VQ
0471   QV1X:QVQ1VQ
0463   QV1X:QVQ1VQ
0472   QV1X:QVQ1VQ
1193      :QVR                                  Carboxylic acids— only
0424      :QVR BOV1                               those starting with QV . . .
0560      :QVR CQ DQ EOVR CQ DQ EQ
0512      :QVVQ
1188    1VY:QVV1
0190      :QVXGG
1183      :QVY
0202      :QVYOR
0300      :QVYQYQVO &-KA-
0442      :QVYQYQVO &-KA-
0464      :QVYQYQVQ
0474      :QVYQYQVO
0473      :QVYQYQVO
0469      :QVYQYQVQ
0470      :QVYQYQVQ
0467      :QVYQYQVQ
0468      :QVYQYQVQ
0493      :QVYQYQVO
0298      :QVYQYQVQ
0849      :QVYQYQVQ
0846      :QVYQYQVQ
0838      :QVYQYQVQ
0041      :QVYQYQVQ
0086      :QVYQYQVQ
0117      :QVYQ1VQ
0844      :QVYQ1VQ
0839      :QVYQ1VO
0293      :QVYQ1VO
1113      :QVYQ1VO
1114      :QVYQ1VO
1112      :QVYQ1VO
```

0465	:QVYQ1VQ
0491	:QVYQ2VQ
1191	:QVYU2 -T
0871	:QVYZY
0873	:QVYZY2
0858	:QVYZ1Q
0874	:QVYZ1R
0867	:QVYZ1VO &-NA-
0862	:QVYZ1VQ
0876	:QVYZ1Y
0870	:QVYZ2S1
0866	:QVYZ2VO &-NA-
0863	:QVYZ2VQ
0565	:QVYZ2VQ
0566	:QVYZ2VQ
0872	:QVYZ3MYZUM
0869	:QVYZ3MYZUM &GH
1080	:QVY2
0982	:QV1
0983	:QV1
0146	:QV1
0119	:QV1
0144	:QV1
0667	:QV1
0699	:QV1
0743	:QV1
0462	:QV1
0215	:QV1OR 8G DG
0317	:QV1OR BG DG &-NA-
0200	:QV1OR BG DG EG
0297	:QV1XQVQ1VQ
0094	:QV1XQVQ1VQ
0087	:QV1XQVQ1VQ
0044	:QV1XQVQ1VQ
0840	:QV1XQVQ1VQ
0842	:QV1XQVQ1VQ
1118	:QV1XQVQ1VQ
1120	:QV1XQVQ1VQ
1119	:QV1XQVQ1VQ
0463	:QV1XQVQ1VQ
0472	:QV1XQVQ1VQ
0471	:QV1XQVQ1VQ
0489	:QV1XQVQ1VQ
0490	:QV1XQVQ1VQ
1184	:QV1Y
0626	:QV10
0628	:QV11
1049	:QV11
0136	:QV11
0629	:QV12
0630	:QV13
1051	:QV13
0632	:QV14
1050	:QV15
0362	:QV15

0633	:QV16
1052	:QV17
0361	:QV17
0536	:QV18
0531	:QV19
1182	:QV2
0545	:QV2V0
0546	:QV2V0
0301	:QV2V0
1194	:QV2V1
0706	:QV3
0816	:QV3
0483	:QV3
0682	:QV3
0282	:QV3
0238	:QV3
0354	:QV3
0370	:QV3
0355	:QV3
0423	:QV3
0421	:QV3
0143	:QV3
0142	:QV3
1012	:QV3
1011	:QV3
1045	:QV3
0975	:QV3
0977	:QV3
0974	:QV3
1084	:QV3
0834	:QV4
0568	:QV4
0616	:QV5
0446	:QV5
0772	:QV5
0711	:QV5
0710	:QV5
0140	:QV5
0141	:QV5
0991	:QV5
0990	:QV5
1054	:QV5
0617	:QV6
0619	:QV7
0709	:QV7
1047	:QV7
0989	:QV7
0138	:QV7
0139	:QV7
0621	:QV8
1046	:QV8U3U6 -CC
1048	:QV9
0137	:QV9
0135	:QV9
0625	:QV9

0724	:QV9
0600	:QX2&2R
0860	:QY&YZVQ
0300	QVY:QYQVO &-KA-
0442	QVY:QYQVO &-KA-
0468	QVY:QYQVQ
0474	QVY:QYQVQ
0467	QVY:QYQVQ
0470	QVY:QYQVQ
0473	QVY:QYQVQ
0469	QVY:QYQVQ
0464	QVY:QYQVQ
0493	QVY:QYQVQ
0298	QVY:QYQVQ
0846	QVY:QYQVQ
0849	QVY:QYQVQ
0838	QVY:QYQVQ
0041	QVY:QYQVQ
0086	QVY:QYQVQ
0660	:QYR
1180	:QYVO2
0492	:QYVQ
0466	:QYVQ
0134	:QYVQ
0845	:QYVQ
0852	:QYVQ
0841	:QYVQ
0296	:QYVQ
1166	:QY2&1U1
1229	:QY3&1U1
0656	:QY3&3
1230	:QY4&1U1
1231	:QY5&1U1
0812	:QY5&1U1
0766	:QY5&1U1
0387	:QY5&1U1
1233	:QY5&1U2
1232	:QY6&1U1
0700	:Q1
0481	Q1Y:Q1Q
0305	Q1Y:Q1Q
0004	Q1Y:Q1Q
0638	:Q1R
0489	QV1XQV:Q1VQ
0490	QV1XQV:Q1VQ
0472	QV1XQV:Q1VQ
0465	QVY:Q1VQ
0463	QV1XQV:Q1VQ
0471	QV1XQV:Q1VQ
0044	QV1XQV:Q1VQ
0117	QVY:Q1VQ
0094	QV1XQV:Q1VQ
0087	QV1XQV:Q1VQ
0293	QVY:Q1VQ
0297	QV1XQV:Q1VQ

Other hydroxyls

```
0840                QV1XQV:Q1VQ
0842                QV1XQV:Q1VQ
0844                   QVY:Q1VQ
0839                   QVY:Q1VQ
1114                   QVY:Q1VQ
1118                QV1XQV:Q1VQ
1113                   QVY:Q1VQ
1120                QV1XQV:Q1VQ
1112                   QVY:Q1VQ
1119                QV1XQV:Q1VQ
0985                      :Q1Y
1177                      :Q1Y
0481                      :Q1YQ1Q
0305                      :Q1YQ1Q
0004                      :Q1YQ1Q
0655                      :Q1Y4&2
0578                      :Q2
0748                      :Q2
0791                      :Q2
0233                      :Q2
0234                      :Q2
0350                      :Q2
0352                      :Q2
0417                      :Q2
0415                      :Q2
0419                      :Q2
0416                      :Q2
1091                      :Q2
1094                      :Q2
1093                      :Q2
1095                      :Q2
1179                      :Q2R
1169                      :Q2S1
0744                      :Q2U1
0934                      :Q2U1
0880                      :Q2U1
0039                      :Q2U1
0491                   QVY:Q2VQ
1019                      :Q2Y
1058                      :Q2Y
1017                      :Q2Y
1018                      :Q2Y
1025                      :Q3
0348                      :Q3
0353                      :Q3
0579                      :Q3
1167                      :Q3U3 -C
0813                      :Q4
0576                      :Q4
0121                      :Q4
0986                      :Q4
0835                      :Q5
0556                      :Q5Q0
0577                      :Q6
0789                      :Q6
```

1178	:Q6	
0732	:Q7	
0727	:Q7	
1066	:Q7	
0167	:Q7	
0333	:Q7	
0369	:Q7	
0122	:Q8	
1065	:Q8	BENZENE DERIVATIVES
1061	VH:R	
1037	E1V:R	
1076	CN:R	
1071	SCN:R	
1077	CN:R	
1057	20V1U1:R	
0955	RS:R	
0962	WN:R	
0942	SH1:R	
0956	RO:R	
0941	R1S1:R	
0940	VH:R	
0964	SCN:R	
0965	SH:R	
0895	SH1:R	
0925	CN:R	
0918	SCN:R	
0896	R1S1:R	
0894	G1:R	
0907	RO:R	
0898	E1V:R	
0920	SH:R	
0909	RS:R	
0919	CN:R	
0915	WN:R	
0893	VH:R	
0874	QVYZ1:R	
1086	Q:R	
0120	E1V:R	
0115	Z:R	
0111	:R	
0123	Q:R	
0126	1U1:R	
0051	VH:R	
0005	RS:R	
0050	SH1:R	
0008	G-AS-R&:R	
0042	G1:R	
0027	SH:R	
0029	SCN:R	
0030	CN:R	
0003	NC-AS-R&:R	
0015	G1V:R	
0105	SH:R	
0060	WN:R	
0390	SH:R	

```
0325                                    2:R
0383                                   2OV:R
0389                                    SH:R
0429                                     :R
0411                                    VH:R
0403                                     Z:R
0418                                    VH:R
0404                                     Z:R
0413                                    VH:R
0412                                    VH:R
0253                                   G1V:R
0252                                   E1V:R
0241                                   SH1:R
0250                                   SCN:R
0240                                    SH:R
0271                                    CN:R
0269                                    RO:R
0202                                   QVYO:R
0720                                     1:R
0708                                    WN:R
0721                                     1:R
0712                                     Q:R
0707                                     G:R
0716                                   1U1:R
0759                                    WN:R
0728                                    RS:R
0717                                   1U1:R
1179                                    Q2:R
1181                                   2OV1:R
1174                                   VH1:R
1193                                    QV:R
0817                                  SUYZM:R
0796                                    1Y:R
0829                                    CN:R
0557                  T56 A ANTJ A FV01 GVO:R
0663                                    1V:R
0638                                    Q1:R
0660                                    QY:R
0692                                    RS:R
0680                                   R1S1:R
0664                                   1U1:R
0677                                     Z:R
0691                                    RO:R
0679                                    G1:R
0665                                     2:R
0678                                      :R
0620                                    VH:R
0600                                  QX2&2:R
0507                                     2:R
0445                                  SUYZM:R
0128                                     Q:R 8
0425                                    WN:R 8 CNW ENW DX
0394                                    WN:R 8 CNW ENW DX
0393                                    WN:R 8 CNW ENW DX
0441                                    WN:R 8 CNW ENW DX
```

0392 WN:R B CNW ENW DX
0391 WN:R B CNW ENW DX
0440 WN:R B D CNW ENW FX
002B WN:R B D CNW ENW FX
1098 WN:R B D CNW ENW FX
0906 WN:R B D CNW ENW FX
0957 WN:R B D CNW ENW FX
1096 WN:R B D CNW ENW FX
0254 Q:R BG
0215 QV1O:R BG DG
0102 Q:R BG DG
0317 QV1O:R BG DG &-NA-
0533 OV1O:R BG DG &-NA-
0200 QV1O:R BG DG EG
0424 QV:R BOV1
0642 Q:R BO1
0643 Q:R BO1
0644 Q:R BO1
0510 WN:R BQ
0444 WN:R BQ CNW ENW
0594 1O:R BQ CO1
0595 1O:R BQ CO1
0593 1O:R BQ CO1
0650 Q:R BVO1
0768 Q:R BVO1
0769 Q:R BVO1
0742 Z:R BVO1
0434 Q:R BVO1
0433 Q:R BVO1
0284 Q:R BVO1
0049 Z:R BVO1
0960 Z:R BVO1
0913 Z:R BVO1
0127 Q:R C
0439 1:R C
0131 1:R C E
0205 G:R CG DO1VOY
0206 G:R CG DO1VOY
0207 G:R CG DO1VO1X&&1Y
0811 2U1:R CQ DO2
0810 2U1:R CQ DO2
0809 2U1:R CQ DO2
0560 QV:R CQ DQ EOVR CQ DQ EQ
0560 QVR CQ DQ EOV:R CQ DQ EQ
0764 1:R D
0740 Q:R D
0722 OCN:R D
0242 SH:R D
1101 Q:R D BO1
1100 Q:R D BO1
0649 Q:R D BO1
0505 GR DSWO:R DG
0191 GXGGR DG&:R DG
0312 GR DSWO:R DG
0118 Q:R DG

```
0191                GXGG:R DG&R OG
0203                  WN:R DOPS&01&01
0211                  WN:R DOPS&02&02
0218                  WN:R OOPS&R&02
0213          10R DYXGGG:R 001
0981                 2U1:R 001
0980                 2U1:R 001
0653                 2U1:R 001
0598                  VH:R OQ C01
0802                  VH:R OQ C01
0801                  VH:R OQ C01
0800                  VH:R OQ C01
1082                  VH:R OQ C01
0249                  VH:R OQ C01
0076                  VH:R OQ C01
0438                  VH:R DQ C01
0805                  VH:R OQ C02
0803                  VH:R OQ C02
0804                  VH:R DQ C02
0451            T6OTJ 8O:R OQ& CQ OQ EQ F1Q
0505                   G:R OSWOR DG
0312                   G:R OSWOR DG
0213                  10:R DYXGGGR 001
0107                   1:R X
0026                  SH:R X
1081                   1:R X
0966                  SH:R X
1083                   Q:R XG
0043                   Q:R XG
0453          T5NNVJ A 8:R& E
0218           WNR DOPS&:R&02
0003              NC-AS-:R&R
0008               G-AS-:R&R
0450  T56 A ANTJ A GOVY:R&1Q
0691                  :ROR
0269                  :ROR
0956                  :ROR
0907                  :ROR
0909                  :RSR
0955                  :RSR
0005                  :RSR
0692                  :RSR
0728                  :RSR
0680                  :R1S1R
0941                  :R1S1R
0896                  :R1S1R
0905                 SC:S
0683                 SC:S
0615               T7SS:S ESSTJ
0614               T7SS:S ESSTJ
0193  T66 BOVJ DG E IOP:S& 02&02
0203          WNR OOP:S&01&01
0219    T66 BNNNVJ C1SP:S&01&01
0220       2OV1YV02&SP:S&01&01
0211          WNR OOP:S&02&02
```

SULFUR-CONTAINING COMPOUNDS

0192	T60 DOTJ B- C-/SP:S&02&02 2	
0218	WNR DOP:S&R&02	
0570	.MG..:S-04	
0250	:SCNR	Isothiocyanates
0029	:SCNR	
0918	:SCNR	
0964	:SCNR	
1071	:SCNR	
0833	:SCN1	
0248	:SCN2	
0262	:SCN2U1	
0257	:SCN2U1	
0056	:SCN2U1	
1069	:SCN2U1	
0935	:SCN2U1	
0884	:SCN2U1	
0905	:SCS	
0683	:SCS	
0001	2-:SE-H	SELENIUM COMPOUNDS
0256	2-:SE-H	
0258	2-:SE-H	
0034	2-:SE-2	
0718	G:SG	SULFUR-CONTAINING COMPOUNDS, CONTINUED
0007	SH2:SH	Mercaptans
0239	SH2:SH	
0910	SH2:SH	
0959	SH2:SH	
0912	:SHH	
0075	:SHH	
0430	:SHH	
0698	:SHH	
0389	:SHR	
0390	:SHR	
0105	:SHR	
0027	:SHR	
0240	:SHR	
0920	:SHR	
0965	:SHR	
0242	:SHR O	
0026	:SHR X	
0966	:SHR X	
0456	:SHY2	
0705	:SH1	
0287	:SH1	
0998	:SH1	
0961	:SH1	
0914	:SH1	
0048	:SH1	
0177	:SH1	
0232	:SH1	
0275	:SH1	
0346	:SH1	
0360	:SH1	
0241	:SH1R	
0050	:SH1R	

```
0895                                  :SH1R
0942                                  :SH1R
0781                                  :SH1Y
0695                                  :SH2
0562                                  :SH2
0958                                  :SH2
0911                                  :SH2
1089                                  :SH2
0070                                  :SH2
0235                                  :SH2
0400                                  :SH2
0399                                  :SH2
0402                                  :SH2
0401                                  :SH2
0110                                  :SH2Q
0007                                  :SH2SH
0239                                  :SH2SH
0910                                  :SH2SH
0959                                  :SH2SH
0932                                  :SH2U1
0885                                  :SH2U1
0263                                  :SH2U1
0055                                  :SH2U1
0013                                  :SH2U2
0243                                  :SH2U2
0903                                  :SH2U2
0950                                  :SH2U2
0926                                  :SH2Y
0891                                  :SH2Y
0246                                  :SH2Y
0180                                  :SH2Y
0016                                  :SH3
0916                                  :SH3
0778                                  :SH3
0822                                  :SH3
0780                                  :SH4
0901                                  :SH4
0948                                  :SH4
0033                                  :SH4
0116                                  :SH4
0158                                  :SH4
0020                                  :SH5
1176                          T5N C:SJ B1Y
1109                             T5:SJ C D
0719                              0:SO
0322                            2S2:SPO&01&01 &&
0307                              1:SPQO&S1
0309                              2:SPQO&S2
0220                      20V1YV02&:SPS&01&01
0219                    T66 8NNNVJ C1:SPS&01&01
0192                  T60 DOTJ B- C-/:SPS&02&02 2
0318                            1Y&:SPWSY &-KA-
0532                              2:SPWS2 &-KA-
0304                              Q:SQO
0303                              W:SQQ
```

Other sulfur-containing compounds

0554	W:SQQ	
0555	W:SQQ	
0692	R:SR	Sulfides and polysulfides
0728	R:SR	
0005	R:SR	
0955	R:SR	
0909	R:SR	
0614	T7S:SS ESSTJ	
0615	T7S:SS ESSTJ	
0615	T7:SSS ESSTJ	
0614	T7:SSS ESSTJ	
0614	T7SSS E:SSTJ	
0615	T7SSS E:SSTJ	
0592	1:SS1	
0288	1:SS1	
1015	1:SS1	
1023	1:SS1	
1107	2U1:SS1	
0176	1:SS1	
0088	1:SS1	
0089	1:SS1	
0277	1:SS1	
0222	1:SS1	
1108	3:SS1U2	
0882	1U2:SS2U1	
0954	1U2:SS2U1	
0057	1U2:SS2U1	
1105	3:SS2U1 &&	
1106	3:SS3	
0615	T7SSS ES:STJ	Other sulfur-containing compounds
0614	T7SSS ES:STJ	
0010	:SUYS1&S1	
0259	:SUYS1&S1	
0445	:SUYZMR	
0817	:SUYZMR	
0814	T56 B:SWMVJ	
0479	T56 8:SWMVJ	
0487	T56 B:SWMVJ	
0815	T56 8:SWNVJ &-NA-	
0505	GR D:SWOR DG	
0312	GR D:SWOR DG	
0318	1Y&SPW:SY &-KA-	
0307	1SPQQ&:S1	
0278	1:S1	
0277	1S:S1	
0259	SUYS1&:S1	
0223	VHYZ2:S1	
0251	NC:S1	
0222	1S:S1	
0384	1:S1	
0357	1:S1	
0356	1:S1	
0870	QVYZ2:S1	
0010	SUYS1&:S1	
0024	1:S1	

```
0025                                    1:S1
0047                                    1:S1
0088                                   1S:S1
0080                                 VHYZ2:S1
0072                                    NC:S1
0098                                 VHYZ2:S1
0089                                   1S:S1
0176                                   1S:S1
0150                                   6V:S1
0151                                   5V:S1
1107                                 2U1S:S1
1110                                 WS3&:S1
1001                                 VHYZ2:S1
1000                                    1:S1
0939                                    1:S1
0924                                    1:S1
1014                                    1:S1
1023                                   1S:S1
1015                                   1S:S1
0506                                    1:S1
0729                                    1:S1
0725                                    1:S1
1168                                  VH1:S1
1169                                   Q2:S1
1170                                  VH1:S1
0592                                   1S:S1
0288                                   1S:S1
0010                                 SUY:S1&S1
0259                                 SUY:S1&S1
0896                                  R1:S1R
0941                                  R1:S1R
0680                                  R1:S1R
1108                                  3S:S1U2
0953                                2Y&1:S1Y2
0922                                    2:S2
0927                                    2:S2
0244                                    2:S2
0309                               2SPQO&:S2
0069                                    NC:S2
0071                                    2:S2
0832                                    2:S2
0532                                2SPW:S2 &-KA-
0012                                  G2:S2G
0255                                  G2:S2G
0322                                   2:S2SPO&O1&O1 &&
0247                                 1U2:S2U1
0057                                1U2S:S2U1
0054                                 1U2:S2U1
0882                                1U2S:S2U1
0886                                 1U2:S2U1
0951                                 1U2:S2U1
0954                                1U2S:S2U1
1105                                  3S:S2U1 &&
0892                                1Y&2:S2Y
0021                                1Y&2:S2Y
```

```
0063                                3:S3
0261                                3:S3
0921                                3:S3
0952                                3:S3
1111                              WS3&:S3
1106                                3S:S3
1110                                 W:S3&S1
1111                                 W:S3&S3
0902                                 4:S4
0947                                 4:S4
0245                                 4:S4
0032                                 4:S4
0435                                 4:S4
0831                                 5:S5
0009                                  :T C666 B-AS- IMJ BG                                  HETEROCYCLIC
0217                                  :T E3 D5 C555 A D- FO KUTJ AG AG BG JG K*              DERIVATIVES
0216                                  :T E3 D5 C555 A D- FO KUTJ AG AG BG JG K*
0212                                  :T G5 D6 B666 CV HO MO POT&TT&J IYU1 S*
0558                          L B677 MV&:T&J C01 D01 E01 JMV1 N01                            SATURATED RINGS
0212                T G5 D6 B666 CV HO MO PO:T&TT&J IYU1 S*
0640                                  :T-18-0VTJ
0659                              L66&:TJ
0640                            T-18-0V:TJ
0615                           T7SSS ESS:TJ
0614                           T7SSS ESS:TJ
0612                              L-15-V:TJ
1200                                T50V:TJ
0280                              L-15-V:TJ
1070                                L6V:TJ
0573                         T6NJ C- BT5N:TJ A
0572                         T6NJ C- BT5N:TJ A
0987                               L55 A:TJ A A B CQ
0183                            L46 A EU:TJ A A E
0182                            L46 A EY:TJ A A EU1
0090                                 L6U:TJ A B1U1V1 C C
0347                                 L6U:TJ A B1U1V1 C C
0345                                 L6U:TJ A B1U1V1 C C
0971                                 L6U:TJ A DXQ
0972                                 L6U:TJ A DXQ
1173                                 L6U:TJ A DYU1
1056                                 L6U:TJ A E E F1U1V1
0414                                 L6U:TJ A E E F1U1V1
0410                                 L6U:TJ A E E F1U1V1
0557                            T56 A AN:TJ A FV01 GVOR
0450                            T56 A AN:TJ A GOVYR&1Q
0214                         L C555 A IU:TJ AG AG BG DG EG HG IG JG
0210                         L C555 A IU:TJ AG AG BG DG EG HG IG JG
0209                         L C555 A IU:TJ AG AG BG DG EG HG IG JG
0221                   L C555 A EU IU:TJ AG AG BG DG HG IG *
0208              L D5 C555 A D- EU JU:TJ AG AG BG IG JG KG
0217           T E3 D5 C555 A D- FO KU:TJ AG AG BG JG K*
0216           T E3 D5 C555 A D- FO KU:TJ AG AG BG JG K*
0320                                 L6:TJ ANW
1016                                 L5:TJ AOV1
0324                                 L6:TJ AQ
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0994                                    L57 GU:TJ AQ BY E H
0970                                    L6Y CU:TJ AUY D
0969                                    L35 DY:TJ AY DU1
00B5  T66 BNJ HO1 EYQ- DT66 A B CN:TJ A1U*
0477  T66 BNJ HO1 EYQ- DT66 A B CN:TJ A1U*
0499  T66 BNJ HD1 EYQ- DT66 A B CN:TJ A1U*
0494  T66 BNJ HD1 EYQ- DT66 A B CN:TJ A1U*
0500  T66 BNJ HD1 EYQ- DT66 A B CN:TJ A1U*
0501  T66 BNJ HO1 EYQ- DT66 A B CN:TJ A1U*
0516  T66 BNJ HO1 EYQ- DT66 A B CN:TJ A1U1
0515  T66 BNJ HD1 EYQ- OT66 A B CN:TJ A1U1
0517  T66 BNJ HO1 EYQ- DT66 A B CN:TJ A1U1*
0495  T66 BNJ HO1 EYQ- DT66 A B CN:TJ A1U1*
0504  T66 BNJ HD1 EYQ- OT66 A B CN:TJ A1U1*
0496  T66 BNJ HO1 EYQ- DT66 A B CN:TJ A1U1*
047B  T66 BNJ HO1 EYQ- OT66 A B CN:TJ A1U1*
0092  T66 BNJ HO1 EYQ- DT66 A B CN:TJ A1U1*
0093  T66 BNJ HD1 EYQ- DT66 A B CN:TJ A1U1*
0420  T66 BNJ HO1 EYQ- OT66 A B CN:TJ A1U1*
1115  T66 BNJ HO1 EYQ- OT66 A B CN:TJ A1U1*
1117  T66 BNJ HO1 EYQ- DT66 A B CN:TJ A1U1*
1116  T66 BNJ HD1 EYQ- DT66 A B CN:TJ A1U1*
0162                      L49 EY HU:TJ B B EU1 I
C995                     T66 A B AO:TJ B B F
0641                     T66 A B AD:TJ B B F
1201                         T6O OV:TJ B CQ EQ
0192                         T6O DO:TJ B- C-/SPS&02&02 2
0451                            T6D:TJ BDR DQ& CQ DQ EQ F1Q
0563                            T5O:TJ BQ B1Q CQ DQ E1Q
02B5                            T5O:TJ BQ B1Q CQ OQ E1Q
0037                            T5D:TJ BQ B1Q CQ DQ E1Q
0B47                            T6O:TJ BQ CQ DQ EQ F1Q
02B6                            T6D:TJ BQ CQ DQ EQ F1Q
0564                            T6D:TJ BQ CQ DQ EQ F1Q
0B37                            T6O:TJ BQ CQ DQ EQ F1Q
0571                            L6D:TJ BQ CQ OQ F1Q EO- BT6DTJ CQ DQ EQ*
0447                            L6D:TJ BQ CQ OQ F1Q ED- BT6OTJ CQ DQ EQ*
0B61                            T5M:TJ BVQ
0B54                            T5M:TJ BVQ DQ
0647                            L6V:TJ BY E
049B   T6DTJ B1Q CQ DQ EQ FD- BT5O:TJ B1Q CQ D*
0553   T6OTJ B1Q CQ DQ EQ FD- BT5D:TJ B1Q CQ D*
0548   T6DTJ B1Q CQ DQ EQ FD- BT5D:TJ B1Q CQ D*
0549   T6OTJ B1Q CQ DQ EQ FD- BT5O:TJ B1Q CQ D*
0551   T6OTJ B1Q CQ DQ EQ FO- BT5O:TJ B1Q CQ D*
0547   T6OTJ B1Q CQ DQ EQ FO- BT5D:TJ B1Q CQ D*
0552   T6DTJ B1Q CQ DQ EQ FO- BT5O:TJ B1Q CQ O*
0550   T6DTJ B1Q CQ DQ EQ FD- BT5O:TJ B1Q CQ D*
0B4B   T6DTJ B1Q CQ DQ EQ FD- BT5D:TJ B1Q CQ D*
0100   T6DTJ B1Q CQ DQ EQ FO- BT5O:TJ B1Q CQ D*
0099   T6OTJ B1Q CQ OQ EQ FO- BT5D:TJ B1Q CQ D*
0302   T6DTJ B1Q CQ OQ EQ FO- BT5D:TJ B1Q CQ D*
0302                            T6D:TJ B1Q CQ OQ EQ FD- BT5OTJ B1Q CQ D*
0099                            T6O:TJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
0100                            T6D:TJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
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0848                                T6O:TJ B1Q CQ DQ EQ FO- 8T5OTJ 81Q CQ D*
0552                                T6O:TJ 81Q CQ DQ EQ FO- 8T5OTJ 81Q CQ D*
0550                                T6O:TJ 81Q CQ DQ EQ FO- 8T5OTJ 81Q CQ D*
0547                                T6O:TJ 81Q CQ DQ EQ FO- 8T5OTJ 81Q CQ D*
0549                                T6O:TJ 81Q CQ DQ EQ FO- 8T5OTJ 81Q CQ D*
0551                                T6O:TJ B1Q CQ DQ EQ FO- 8T5OTJ B1Q CQ D*
0553                                T6O:TJ 81Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
0548                                T6O:TJ B1Q CQ DQ EQ FO- BT5OTJ 81Q CQ D*
0498                                T6O:TJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ D*
1186                              L5VV:TJ C
1090                             L-15-V:TJ C
1189                               T6OV:TJ CQ
0561                 T66 BOVJ IQ HO- 8T6O:TJ CQ DQ EQ F1Q
0571          L6OTJ 8Q CQ DQ F1Q EO- 8T6O:TJ CQ DQ FQ*
0447          L6OTJ 8Q CQ DQ F1Q EO- 8T6O:TJ CQ DQ EQ*
0308                             T6O CO:TJ D D
1067                             L6V CV:TJ E E
0607                          L66 CV AU:TJ E F HYU1
0610                          L66 CV AU:TJ E F HYU1
0608                          L66 CV AU:TJ E F HYU1
0604                          L66 CV AU:TJ E F HYU1
0602                          L66 CV AU:TJ E F HYU1
0606                          L66 CV AU:TJ E F HYU1
0605                          L66 CV AU:TJ E F HYU1
0611                          L66 CV AU:TJ E F HYU1
0603                          L66 CV AU:TJ E F HYU1
0609                          L66 CV AU:TJ E F HYU1
0756                               T5OV:TJ E2
0751                               T5OV:TJ E3
0752                               T5OV:TJ E4
0601                               T5OV:TJ E4
0652                               T5OV:TJ E5
0753                               T5OV:TJ E5
1030                               T5OV:TJ E5
1043                               T5OV:TJ E6
0622                               T5OV:TJ E6
0758                               T5OV:TJ E7
0757                               T6OV:TJ F3
0279                               T6OV:TJ F4
0274                               T6OV:TJ F5
0035                               T6OV:TJ F5
0694                               T6OV:TJ F5
0599                               T6OV:TJ F6
0618                               T6OV:TJ F7
1044                               T6OV:TJ F7
0746                               T6OV:TJ F9
0310                                  L6:TJ XG XG
0314                                  L6:TJ XNO XG
0319                               L46 A:TJ-/G # &&
0199                               L55 A:TJ-/G # &&
0194                                  L6:TJ-/G 6
0196                                  L6:TJ-/G 6
0198                                  L6:TJ-/G 6
0197                                  L6:TJ-/G 6
0195                                  L6:TJ-/G 6
```

0212 T G5 D6 B666 CV HO MO POT&:TT&J IYU1 S*
0B6B :T5M CNJ D1YZVQ
0B64 :T5M CNJ D1YZVQ &GH
1195 :T5MJ BVH E
1197 :T5MJ BV1
0B61 :T5MTJ BVQ
0B54 :T5MTJ BVQ DQ
1176 :T5N CSJ B1Y
1185 :T5NJ A2 BVH
0453 :T5NNVJ A BR& E
0572 T6NJ C- B:T5NTJ A
0573 T6NJ C- B:T5NTJ A
1223 :T5OJ B
1192 :T5OJ BVH
1175 :T5OJ BVH
1187 :T5OJ BVH E
1199 :T5OJ BVH E1Q
1196 :T5OJ BV1
119B :T5OJ BV1Q
1190 :T5OJ B1Q
122B :T5OJ B1U1
1224 :T5OJ B2
1225 :T5OJ B3
1226 :T5OJ B4
1227 :T5OJ B5
0382 :T5OJ B5
1027 :T5OJ B5
0037 :T5OTJ BQ B1Q CQ DQ E1Q
0285 :T5OTJ BQ B1Q CQ DQ E1Q
0563 :T5OTJ BQ B1Q CQ DQ E1Q
049B T6OTJ B1Q CQ OQ EQ FO- B:T5OTJ B1Q CQ D*
0550 T6OTJ B1Q CQ DQ EQ FO- B:T5OTJ B1Q CQ D*
054B T6OTJ B1Q CQ DQ EQ FO- B:T5OTJ B1Q CQ D*
0552 T6OTJ B1Q CQ DQ EQ FO- B:T5OTJ B1Q CQ D*
0547 T6OTJ B1Q CQ OQ EQ FO- B:T5OTJ B1Q CQ O*
0553 T6OTJ B1Q CQ DQ EQ FO- B:T5OTJ B1Q CQ D*
0551 T6OTJ B1Q CQ DQ EQ FO- B:T5OTJ B1Q CQ D*
0549 T6OTJ B1Q CQ DQ EQ FO- B:T5OTJ B1Q CQ D*
0099 T6OTJ B1Q CQ DQ EQ FO- B:T5OTJ B1Q CQ D*
0100 T6OTJ B1Q CQ DQ EQ FO- B:T5OTJ B1Q CQ D*
0848 T6OTJ B1Q CQ DQ FQ FO- B:T5OTJ B1Q CQ D*
0302 T6OTJ B1Q CQ DQ EQ FO- B:T5OTJ B1Q CQ D*
1200 :T5OVTJ
0756 :T5OVTJ E2
0751 :T5OVTJ E3
0752 :T5OVTJ E4
0601 :T5OVTJ E4
0652 :T5OVTJ E5
0753 :T5OVTJ E5
1030 :T5OVTJ E5
1043 :T5OVTJ E6
0622 :T5OVTJ E6
0758 :T5OVTJ E7
1109 :T5SJ C D
0557 :T56 A ANTJ A FVO1 GVOR

HETEROCYCLIC DERIVATIVES, CONTINUED

5-Membered monocyclic

5,6-Bicyclic

0450	:T56 A ANTJ A GDVYR&1Q
10B5	:T56 BMJ D
0237	:T56 BMJ D
0073	:T56 BMJ D
0B75	:T56 BMJ D1YZVQ
0095	:T56 BN DN FNVNVJ B F H
04B2	:T56 BN DN FNVNVJ B F H
0460	:T56 BN DN FNVNVJ B F H
0476	:T56 BN DN FNVNVJ B F H
045B	:T56 BN DN FNVNVJ B F H
0475	:T56 BN DN FNVNVJ B F H
0459	:T56 BN DN FNVNVJ B F H
04B5	:T56 BN DN FNVNVJ B F H
0503	:T56 BN DN FNVNVJ B F H
04B6	:T56 BN DN FNVNVJ B F H
04B4	:T56 BN DN FNVNVJ B F H
0497	:T56 BN DN FNVNVJ B F H
0502	:T56 BN DN FNVNVJ B F H
1063	:T56 BQ DO CHJ GVH
0428	:T56 BD DO CHJ G2U1
0518	:T56 BQ DO CHJ G2U1
0645	:T56 BD DO CHJ G2U1
04B7	:T56 BSWMVJ
0479	:T56 BSWMVJ
0B14	:T56 BSWMVJ
0B15	:T56 BSWNVJ &-NA-
0541	:T6 G656 B7 C6 E5 D 5ABCEF A& FX *
0542	:T6 G656 B7 C6 E5 D 5ABCEF A& FX MNV*
0543	:T6 G656 B7 C6 E5 D 5ABCEF A& FX*
0544	:T6 G656 B7 C6 E5 D 5ABCEF A& FX*
108B	:T6 G656 B7 C6 E5 D 5ABCEF A& FX*
1122	:T6N DNJ B — 6-Membered monocyclic
1121	:T6N DNJ B
1130	:T6N DNJ B C E
1129	:T6N DNJ B C E
1133	:T6N DNJ B C E F
1134	:T6N DNJ B C E F
1136	:T6N DNJ B C2 E
1135	:T6N DNJ B C2 E
1123	:T6N DNJ B E
1124	:T6N DNJ B E
1125	:T6N DNJ B F
1126	:T6N DNJ B F
0795	:T6N DNJ BO1 C1Y
1127	:T6N DNJ B2
112B	:T6N DNJ B2
1131	:T6N DNJ B2 C
1132	:T6N DNJ B2 C
1138	:T6N DNJ B2 C E
1137	:T6N DNJ B2 C E
1140	:T6N DNJ B5
1139	:T6N DNJ B5
10B7	:T6NJ
0917	:T6NJ
0963	:T6NJ

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0427                                :T6NJ
0045                                :T6NJ
0124                                :T6NJ
0236                                :T6NJ
0715                                :T6NJ
0108                                :T6NJ B E1U1
0109                                :T6NJ B E2
0661                                :T6NJ B E2
0572                                :T6NJ C- BT5NTJ A
0573                                :T6NJ C- BT5NTJ A
030B                                :T6O COTJ D D
0192                                :T6O OOTJ B- C-/SPS&02&02 2
1099                                :T6O OVJ B CQ
1201                                :T6O OVTJ B CQ EQ
0451                                :T6OTJ BOR OQ& CQ OQ EQ F1Q
0837                                :T6OTJ BQ CQ OQ EQ F1Q
0564                                :T6OTJ BQ CQ OQ EQ F1Q
02B6                                :T6OTJ BQ CQ OQ EQ F1Q
0B47                                :T6OTJ BQ CQ DQ EQ F1Q
084B                                :T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0302                                :T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0100                                :T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0099                                :T6OTJ B1Q CQ OQ FQ FO- BT5OTJ B1Q CQ O*
0550                                :T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0547                                :T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ O*
0552                                :T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
054B                                :T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ O*
0549                                :T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ O*
0553                                :T6OTJ B1Q CQ DQ EQ FO- BT5OTJ B1Q CQ O*
0551                                :T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
049B                                :T6OTJ B1Q CQ OQ EQ FO- BT5OTJ B1Q CQ O*
0561                 T66 BOVJ IQ HO- B:T6OTJ CQ OQ EQ F1Q
0571    L6OTJ BQ CQ DQ F1Q EO- B:T6OTJ CQ DQ EQ*
0447    L6OTJ BQ CQ OQ F1Q EO- B:T6OTJ CQ OQ EQ*
1189                                :T6OVTJ CQ
0757                                :T6OVTJ F3
0279                                :T6OVTJ F4
0274                                :T6OVTJ F5
0035                                :T6OVTJ F5
0694                                :T6OVTJ F5
0599                                :T6OVTJ F6
061B                                :T6OVTJ F7
1044                                :T6OVTJ F7
0746                                :T6OVTJ F9 ____________________ 6,6-Bicyclic
0641                                :T66 A B AOTJ B B F
0995                                :T66 A B AOTJ B B F
00B5             T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U*
0494             T66 BNJ HO1 EYQ- O:T66 A B CNTJ A1U*
0499             T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U*
0501             T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U*
0500             T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U*
0477             T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U*
0516             T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1
0515             T66 BNJ HO1 EYQ- O:T66 A B CNTJ A1U1
0496             T66 BNJ HO1 EYQ- O:T66 A B CNTJ A1U1*
```

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0504                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
0495                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
0478                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
0517                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
0093                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
0092                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
0420                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
1115                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
1117                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
1116                                T66 BNJ HO1 EYQ- D:T66 A B CNTJ A1U1*
0125                                              :T66 BNJ
0085                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U*
0477                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U*
0500                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U*
0501                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U*
0494                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U*
0499                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U*
0516                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1
0515                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1
0504                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
0517                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
0495                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
0496                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
0478                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
0093                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
0092                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
0420                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
1115                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
1116                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
1117                                              :T66 BNJ HO1 EYQ- DT66 A B CNTJ A1U1*
0511                                              :T66 BNJ HO2 EYQ- DT66 A B C*
0219                                              :T66 BNNNVJ C1SPS&01&01
0264                                              :T66 BOVJ
0065                                              :T66 BOVJ
0949                                              :T66 BOVJ
0904                                              :T66 BOVJ
0559                                              :T66 BOVJ
0807                                              :T66 BOVJ
0806                                              :T66 BOVJ
0808                                              :T66 BOVJ
0193                                              :T66 BOVJ DG E IOPS& 02&02
0561                                              :T66 BOVJ IQ HO- BT6OTJ CQ DQ EQ F1Q
0615                                              :T77SSS ESSTJ
0614                                              :T7SSS ESSTJ
0221                                    L C555 A E:U IUTJ AG AG BG DG HG IG *
0208                                 L D5 C555 A D- E:U JUTJ AG AG BG IG JG KG
0085 T66 BNJ HO1 EYQ- DT66 A B CNTJ A1:U*
0500 T66 BNJ HO1 EYQ- DT66 A B CNTJ A1:U*
0499 T66 BNJ HO1 EYQ- DT66 A B CNTJ A1:U*
0494 T66 BNJ HO1 EYQ- DT66 A B CNTJ A1:U*
0501 T66 BNJ HO1 EYQ- DT66 A B CNTJ A1:U*
0477 T66 BNJ HO1 EYQ- DT66 A B CNTJ A1:U*
0872                                    QVYZ3MYZ:UM
0869                                    QVYZ3MYZ:UM &GH
0183                                     L46 A E:UTJ A A E
```

7-Membered monocyclic

UNSATURATED COMPOUNDS

```
0090                                L6:UTJ A 81U1V1 C C
0345                                L6:UTJ A 81U1V1 C C
0347                                L6:UTJ A B1U1V1 C C
0972                                L6:UTJ A DXQ
0971                                L6:UTJ A DXQ
1173                                L6:UTJ A DYU1
1056                                L6:UTJ A E E F1U1V1
0414                                L6:UTJ A E E F1U1V1
0410                                L6:UTJ A E E F1U1V1
0214                          L C555 A I:UTJ AG AG BG DG EG HG IG JG
0209                          L C555 A I:UTJ AG AG 8G DG EG HG IG JG
0210                          L C555 A I:UTJ AG AG 8G DG EG HG IG JG
0221                    L C555 A EU I:UTJ AG AG 8G DG HG IG *
0208               L D5 C555 A D- EU J:UTJ AG AG BG IG JG KG
0217          T E3 D5 C555 A D- FO K:UTJ AG AG BG JG K*
0216          T E3 D5 C555 A D- FO K:UTJ AG AG 8G JG K*
0994                          L57 G:UTJ AQ BY E H
0970                          L6Y C:UTJ AUY D
0162                       L49 EY H:UTJ B B EU1 I
0611                       L66 CV A:UTJ E F HYU1
0610                       L66 CV A:UTJ E F HYU1
0606                       L66 CV A:UTJ E F HYU1
0605                       L66 CV A:UTJ E F HYU1
0602                       L66 CV A:UTJ E F HYU1
0604                       L66 CV A:UTJ E F HYU1
0607                       L66 CV A:UTJ E F HYU1
0603                       L66 CV A:UTJ E F HYU1
0609                       L66 CV A:UTJ E F HYU1
0608                       L66 CV A:UTJ E F HYU1
0651                        VH1UY&3:UY
0508                        VH1UY&3:UY
0040                              2:UY
0992                        VH1UY&3:UY
0993                        VH1UY&3:UY
0938                              2:UY
0888                              2:UY
0185                      2V02UY&3:UY -T
0184                     1Y&V02UY&3:UY -T
0970                     L6Y CUTJ A:UY D
0992                            VH1:UY&3UY
0993                            VH1:UY&3UY
0508                            VH1:UY&3UY
0651                            VH1:UY&3UY
0185                           2V02:UY&3UY -T
0184                          1Y&V02:UY&3UY -T
0755                             GYG:UYGG
0010                                S:UYS1&S1
0259                                S:UYS1&S1
0749                                1:UYV01
0817                                S:UYZMR
0445                                S:UYZMR
0326                                1:UY1U1
0326                             1UY1:U1
0263                              SH2:U1
0247                            1U2S2:U1
```

0262	SCN2:U1
0273	VH1U:U1
0257	SCN2:U1
0272	Z2:U1
0270	CN2:U1
0428	T56 8O DO CHJ G2:U1
0387	QY5&1:U1
0019	CN2:U1
0038	Z2:U1
0039	Q2:U1
0056	SCN2:U1
0054	1U2S2:U1
0055	SH2:U1
0036	VH1:U1
0057	1U2SS2:U1
0182	L46 A EYTJ A A E:U1
0148	3:U1
0179	1Y&U3Y1:U1
0114	G2:U1
0113	NC1:U1
0108	T6NJ B E1:U1
0101	2OV1:U1
0969	L35 DYTJ AY D:U1
0881	Z2:U1
0934	Q2:U1
0951	1U2S2:U1
0878	VH1:U1
0900	3:U1
0884	SCN2:U1
0882	1U2SS2:U1
0945	3:U1
0933	Z2:U1
0943	3:U1
0954	1U2SS2:U1
0883	CN2:U1
0931	CN2:U1
0885	SH2:U1
0935	SCN2:U1
0880	Q2:U1
0932	SH2:U1
0930	VH1:U1
0886	1U2S2:U1
1035	1Y:U1
1026	VH1:U1
1069	SCN2:U1
1102	9U:U1
1104	5V1:U1
1103	5V1:U1
0812	QY5&1:U1
0767	1Y&U3YU1&1:U1
0744	Q2:U1
0770	1Y&U3YU1&1:U1
0762	3:U1
0766	QY5&1:U1
0745	4:U1

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0736                                                VH1:U1
1162                                                VH7:U1
1212                                               1U4:U1
1207                                                4U:U1
1204                                                 7:U1
1210                                                9U:U1
1209                                                8U:U1
1166                                             QY2&1:U1
1173                                          L6UTJ A 0Y:U1
1205                                                 B:U1
1164                                               2V1:U1
1211                                               3U2:U1
1208                                                5U:U1
1206                                                 9:U1
1216                                               3U3:U1
1203                                                 5:U1
1161                                               VH7:U1
1217                                               5U2:U1
0671                                               NC1:U1
0672                                                G2:U1
0693                                              20V1:U1
0670                                               VH1:U1
0609                                L66 CV AUTJ E F HY:U1
0603                                L66 CV AUTJ E F HY:U1
0608                                L66 CV AUTJ E F HY:U1
0605                                L66 CV AUTJ E F HY:U1
0611                                L66 CV AUTJ E F HY:U1
0604                                L66 CV AUTJ E F HY:U1
0607                                L66 CV AUTJ E F HY:U1
0610                                L66 CV AUTJ E F HY:U1
0606                                L66 CV AUTJ E F HY:U1
0602                                L66 CV AUTJ E F HY:U1
0624                                               VH1:U1
0518                              T56 B0 DC CHJ G2:U1
1237                                               4V1:U1
1234                                               1V1:U1
1235                                               2V1:U1
1231                                            QY5&1:U1
1230                                            QY4&1:U1
1222                                              6U2:U1
1220                                              6U2:U1
1236                                              3V1:U1
1228                                          T50J B1:U1
1232                                            QY6&1:U1
123B                                               5V1:U1
1221                                              1U7:U1
1218                                              4U3:U1
0645                              T56 B0 00 CHJ G2:U1
1229                                            QY3&1:U1
0516                T66 BNJ H01 EYQ- 0T66 A B CNTJ A1:U1
0515                T66 BNJ H01 EYQ- 0T66 A B CNTJ A1:U1
1105                                            3SS2:U1 &&
0162                           L49 EY HUTJ B B E:U1 I
0212                T G5 06 B666 CV H0 M0 P0T&TT&J IY:U1 S*
0767                                         1Y&U3Y:U1&1U1
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0770	1Y&U3Y:U1&1U1
0517	T66 BNJ HO1 EYQ- DT66 A 8 CNTJ A1:U1*
0495	T66 8NJ HD1 EYQ- DT66 A B CNTJ A1:U1*
0496	T66 8NJ HD1 EYQ- DT66 A 8 CNTJ A1:U1*
0504	T66 BNJ HD1 EYQ- DT66 A 8 CNTJ A1:U1*
0478	T66 8NJ HD1 EYQ- DT66 A B CNTJ A1:U1*
0093	T66 8NJ HD1 EYQ- DT66 A 8 CNTJ A1:U1*
0092	T66 8NJ HD1 EYQ- DT66 A B CNTJ A1:U1*
0420	T66 BNJ HD1 EYQ- DT66 A B CNTJ A1:U1*
1115	T66 BNJ HD1 EYQ- DT66 A 8 CNTJ A1:U1*
1116	T66 8NJ HD1 EYQ- DT66 A 8 CNTJ A1:U1*
1117	T66 BNJ HO1 EYQ- DT66 A B CNTJ A1:U1*
0014	G1:U1-AS-GG
0311	GY1:U1G
0316	GYG:U1G
0723	GYG:U1G
0908	G1:U1G -T
1057	2OV1:U1R
0126	1:U1R
0717	1:U1R
0716	1:U1R
0664	1:U1R
0809	2:U1R CQ DO2
0810	2:U1R CQ DO2
0811	2:U1R CQ DO2
0653	2:U1R DO1
0980	2:U1R DO1
0981	2:U1R DO1
1107	2:U1SS1
1056	L6UTJ A E E F1:U1V1
0414	L6UTJ A E E F1:U1V1
0410	L6UTJ A E E F1:U1V1
1171	1YU2:U1V1
0347	L6UTJ A 81:U1V1 C C
0345	L6UTJ A 81:U1V1 C C
0090	L6UTJ A 81:U1V1 C C
0850	VH1:U1O -T
0013	SH2:U2
0066	VH1:U2
0147	VH1:U2
0260	VH1:U2
0243	SH2:U2
1036	2:U2
0988	VH1:U2
0903	SH2:U2
0950	SH2:U2
0899	2:U2
0946	VH1:U2
1108	3SS1:U2
0826	VH1:U2
0754	2:U2
1219	4U2:U2
1233	QY5&1:U2
1157	VH6:U2 -C
1158	VH6:U2 -C

1213	2U2:U2 -CC
1214	2U2:U2 -CT
1191	QVY:U2 -T
1160	VH6:U2 -T
1165	5V1:U2 -T
1159	VH6:U2 -T
0785	VH1U2:U2 -T
0944	2:U2 -T
1215	2U2:U2 -TT
0186	1Y&U3Y:U2OV1 -T
0057	1:U2SS2U1
0882	1:U2SS2U1
0954	1:U2SS2U1
0886	1:U2S2U1
0951	1:U2S2U1
0054	1:U2S2U1
0247	1:U2S2U1
1211	3:U2U1
1220	6:U2U1
1217	5:U2U1
1222	6:U2U1
1171	1Y:U2U1V1
1219	4:U2U2
1213	2:U2U2 -CC
1214	2:U2U2 -CT
0785	VH1:U2U2 -T
1215	2:U2U2 -TT
0779	VH1:U2U3 -CT
0782	VH1:U2U3 -TT
1009	VH1:U2U4 -TT
1004	VH1:U2U5 -TT
1033	VH1:U2U6 -TT
1163	VH3:U3
1154	VH5:U3 -C
1167	Q3:U3 -C
1153	VH5:U3 -C
0786	VH2:U3 -C
0779	VH1U2:U3 -CT
0787	VH2:U3 -T
1156	VH5:U3 -T
1155	VH5:U3 -T
1006	VH5:U3 -T
0979	VH1:U3 -T
1005	VH1U4:U3 -TC
1032	VH1U5:U3 -TC
1028	VH1U3:U3 -TC
1002	VH1U4:U3 -TT
0999	VH1U5:U3 -TT
0782	VH1U2:U3 -TT
1216	3:U3U1
1218	4:U3U1
1028	VH1:U3U3 -TC
1046	QV8:U3U6 -CC
0154	6:U3VO1
0153	2U4:U3VO1

1172	1Y&U3Y:U3V1
0770	1Y&:U3YU1&1U1
0767	1Y&:U3YU1&1U1
0186	1Y&:U3YU2OV1 -T
1172	1Y&:U3YU3V1
0179	1Y&:U3Y1U1
0173	VH1:U4
0775	VH1:U4
0824	VH1:U4
0777	VH2:U4 -C
1150	VH4:U4 -C
1149	VH4:U4 -C
1152	VH4:U4 -T
1151	VH4:U4 -T
0776	VH2:U4 -T
0784	VH1:U4 -T
1009	VH1U2:U4 -TT
1212	1:U4U1
1005	VH1:U4U3 -TC
1002	VH1:U4U3 -TT
0153	2:U4U3V01
0161	VH1:U5
0774	VH1:U5
0825	VH1:U5
1145	VH3:U5 -C
1146	VH3:U5 -C
1147	VH3:U5 -T
1148	VH3:U5 -T
0783	VH1:U5 -T
1004	VH1U2:U5 -TT
1032	VH1:U5U3 -TC
0999	VH1:U5U3 -TT
1020	4:U5V01
1143	VH2:U6 -C
1144	VH2:U6 -C
1046	QV8U3:U6 -CC
1029	VH1:U6 -T
1033	VH1U2:U6 -TT
1007	VH1:U7
0149	VH1:U7
0823	VH1:U7
1008	VH1:U7 -T
1003	VH1:U7 -T
1142	VH1:U7 -T
1141	VH1:U7 -T
1221	1:U7U1
0851	VH1:U8
1034	VH1:U8 -T
0331	QN:U9
0967	VH1:U9 -T
0608	L66 C:V AUTJ E F HYU1
0602	L66 C:V AUTJ E F HYU1
0606	L66 C:V AUTJ E F HYU1
0609	L66 C:V AUTJ E F HYU1
0610	L66 C:V AUTJ E F HYU1

CARBONYL COMPOUNDS

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0607                                    L66 C:V AUTJ E F HYU1
0611                                    L66 C:V AUTJ E F HYU1
0604                                    L66 C:V AUTJ E F HYU1
0603                                    L66 C:V AUTJ E F HYU1
0605                                    L66 C:V AUTJ E F HYU1
1067                                       L6:V CVTJ E E
0212                                T G5 D6 8666 C:V HO MO POT&TT&J IYU1 S*
0558                                     L B677 M:V&T&J CO1 DO1 EO1 JMV1 NO1
0542  T6 G656 87 C6 E5 D 5ABCEF A& FX MN:V*
0713                                       G:VG
0006                                     GXGG:VG
1063                                T56 BO DO CHJ G:VH
0689                                       Z:VH
1192                                    T5OJ B:VH
1175                                    T5OJ B:VH
1185                                 T5NJ A2 B:VH
1195                                    T5MJ 8:VH E
1187                                    T5OJ B:VH E
1199                                    T5OJ 8:VH E1Q
0739                                          :VHH
0696                                          :VHH
0130                                          :VHH
0853                                          :VHQ
0349                                          :VHQ
0351                                          :VHQ
0406                                          :VHQ
0405                                          :VHQ
0639                                          :VHQ
0480                                          :VHQ
0620                                          :VHR
0418                                          :VHR
0411                                          :VHR
0413                                          :VHR
0412                                          :VHR
0051                                          :VHR
1061                                          :VHR
0940                                          :VHR
0893                                          :VHR
1082                                          :VHR DQ CO1
0076                                          :VHR DQ CO1
0438                                          :VHR DQ CO1
0249                                          :VHR DQ CO1
0598                                          :VHR DQ CO1
0801                                          :VHR DQ CO1
0800                                          :VHR DQ CO1
0802                                          :VHR DQ CO1
0804                                          :VHR DQ CO2
0803                                          :VHR DQ CO2
0805                                          :VHR DQ CO2
0734                                          :VHXGGG
0821                                          :VHY
0175                                          :VHY
0080                                          :VHYZ2S1
0098                                          :VHYZ2S1
0223                                          :VHYZ2S1
```

Aldehydes

Formic acid

Aldehydes

1001	:VHYZ2S1
0984	:VH1
1038	:VH1
0877	:VH1
0929	:VH1
0295	:VH1
0058	:VH1
0409	:VH1
0408	:VH1
0407	:VH1
0589	:VH1
0588	:VH1
0666	:VH1
1174	:VH1R
1170	:VH1S1
1168	:VH1S1
0273	:VH1UU1
0993	:VH1UY&3UY
0992	:VH1UY&3UY
0651	:VH1UY&3UY
0508	:VH1UY&3UY
0624	:VH1U1
0670	:VH1U1
0736	:VH1U1
1026	:VH1U1
0930	:VH1U1
0878	:VH1U1
0036	:VH1U1
0850	:VH1U10 -T
0066	:VH1U2
0147	:VH1U2
0260	:VH1U2
0946	:VH1U2
0988	:VH1U2
0826	:VH1U2
0785	:VH1U2U2 -T
0779	:VH1U2U3 -CT
0782	:VH1U2U3 -TT
1009	:VH1U2U4 -TT
1004	:VH1U2U5 -TT
1033	:VH1U2U6 -TT
0979	:VH1U3 -T
1028	:VH1U3U3 -TC
0173	:VH1U4
0775	:VH1U4
0824	:VH1U4
0784	:VH1U4 -T
1005	:VH1U4U3 -TC
1002	:VH1U4U3 -TT
0161	:VH1U5
0774	:VH1U5
0825	:VH1U5
0783	:VH1U5 -T
1032	:VH1U5U3 -TC
0999	:VH1U5U3 -TT

1029	:VH1U6 -T
1007	:VH1U7
0149	:VH1U7
0823	:VH1U7
1003	:VH1U7 -T
1008	:VH1U7 -T
1142	:VH1U7 -T
1141	:VH1U7 -T
0851	:VH1U8
1034	:VH1U8 -T
0967	:VH1U9 -T
0174	:VH1Y
0077	:VH1Y
0091	:VH1Y
0820	:VH1Y
0771	:VH1Y
0818	:VH10
0171	:VH10
0968	:VH10
0973	:VH10
0997	:VH11
0172	:VH11
0819	:VH11
0726	:VH11
0165	:VH2
0231	:VH2
0292	:VH2
0329	:VH2
0928	:VH2
0923	:VH2
0786	:VH2U3 -C
0787	:VH2U3 -T
0777	:VH2U4 -C
0776	:VH2U4 -T
1144	:VH2U6 -C
1143	:VH2U6 -C
0328	:VH3
0230	:VH3
0291	:VH3
0164	:VH3
0046	:VH3
1163	:VH3U3
1145	:VH3U5 -C
1146	:VH3U5 -C
1148	:VH3U5 -T
1147	:VH3U5 -T
1010	:VH4
0978	:VH4
0163	:VH4
0229	:VH4
0335	:VH4
0422	:VH4
0747	:VH4
0733	:VH4
1150	:VH4U4 -C

1149		:VH4U4 -C
1152		:VH4U4 -T
1151		:VH4U4 -T
0368		:VH5
0334		:VH5
0228		:VH5
0290		:VH5
0166		:VH5
0078		:VH5
0079		:VH5
0059		:VH5
0750		:VH5
0738		:VH5
0731		:VH5
0590		:VH5
1154		:VH5U3 -C
1153		:VH5U3 -C
1155		:VH5U3 -T
1156		:VH5U3 -T
1006		:VH5U3 -T
0227		:VH6
0367		:VH6
0426		:VH6
0788		:VH6
0741		:VH6
1158		:VH6U2 -C
1157		:VH6U2 -C
1159		:VH6U2 -T
1160		:VH6U2 -T
0226		:VH7
0332		:VH7
0168		:VH7
0737		:VH7
1162		:VH7U1
1161		:VH7U1
0169		:VH8
0225		:VH8
0735		:VH8
0794		:VH9
0224		:VH9
0330		:VH9
0170		:VH9
0358		:VH9
0359		:VH9
0065	T66 80	:VJ
0264	T66 80	:VJ
0949	T66 80	:VJ
0904	T66 80	:VJ
0807	T66 80	:VJ
0808	T66 80	:VJ
0814	T56 BSWM	:VJ
0806	T66 80	:VJ
0487	T56 BSWM	:VJ
0479	T56 8SWM	:VJ
0559	T66 80	:VJ

Other carbonyl compounds

```
0815                  T56 BSWN:VJ &-NA-
0453                      T5NN:VJ A BR& E
0099                       T60 O:VJ B CQ
0095            T56 BN ON FNVN:VJ B F H
0486            T56 BN ON FNVN:VJ B F H
0485            T56 BN DN FNVN:VJ B F H
0484            T56 BN DN FNVN:VJ B F H
0476            T56 BN DN FNVN:VJ B F H
0459            T56 BN DN FNVN:VJ B F H
0475            T56 BN ON FNVN:VJ B F H
0460            T56 BN DN FNVN:VJ B F H
0482            T56 BN ON FNVN:VJ B F H
0458            T56 BN DN FNVN:VJ B F H
0497            T56 BN DN FNVN:VJ B F H
0503            T56 BN DN FNVN:VJ B F H
0502            T56 BN DN FNVN:VJ B F H
0219                  T66 BNNN:VJ C1SPS&O1&O1
0193                    T66 BO:VJ OG E IOPS& O2&O2
0561                    T66 BO:VJ IQ HO- BT6OTJ CQ OQ EQ F1Q
0497            T56 BN ON FN:VNVJ B F H
0503            T56 BN ON FN:VNVJ B F H
0502            T56 BN ON FN:VNVJ B F H
0484            T56 BN DN FN:VNVJ B F H
0476            T56 BN DN FN:VNVJ B F H
0460            T56 BN ON FN:VNVJ B F H
0482            T56 BN ON FN:VNVJ B F H
0458            T56 BN ON FN:VNVJ B F H
0475            T56 BN DN FN:VNVJ B F H
0485            T56 BN DN FN:VNVJ B F H
0486            T56 BN ON FN:VNVJ B F H
0459            T56 BN ON FN:VNVJ B F H
0095            T56 BN DN FN:VNVJ B F H
0688                            1:VN1&1        CARBOXYLATE
0300                       QVYQYQ:VO &-KA-     SALTS
0442                       QVYQYQ:VO &-KA-
0866                        QVYZ2:VO &-NA-
0867                        QVYZ1:VO &-NA-     CARBOXYLIC
0557        T56 A ANTJ A FVO1 G:VOR            ESTERS
0206                   GR CG OC1:VOY
0205                   GR CG OO1:VOY
0284                        QR B:VO1
0434                        QR B:VO1
0433                        QR B:VO1
0154                         6U3:VO1
0189                           6:VO1
0153                       2U4U3:VO1
0049                        ZR B:VO1
0960                        ZR B:VO1
0913                        ZR B:VO1
1020                         4U5:VO1
0650                        QR B:VO1
0768                        QR B:VO1
0769                        QR B:VO1
0749                         1UY:VO1
0742                        ZR B:VO1
```

```
0557  T56 A ANTJ A F:VO1 GVOR
0207       GR CG DO1:VO1X&&1Y
0152             1Y&:VO1Y
0155               3:VO1Y2
0156             2Y&1:VO1Y2
0339               3:VO2
0337               7:VO2
0306               5:VO2
0315               3:VO2
0338               5:VO2
0336               4:VO2
1059               4:VO2
1064               3:VO2
0790              2Y:VO2
0760               3:VO2
0765               5:VO2
1180              QY:VO2
0636               7:VO2
0623               3:VO2
0646               7:VO2
0582               3:VO2
0580               4:VO2
0591               6:VO2
0220          2OV1Y:VO2&SPS&O1&O1
0185               2:VO2UY&3UY -T
0184             1Y&:VO2UY&3UY -T
0584               3:VO3
0565            QVYZ2:VQ
0566            QVYZ2:VQ
0844            QVYQ1:VQ
0839            QVYQ1:VQ
0841              QY:VQ
0842          QV1XQVQ1:VQ
0845              QY:VQ
0840          QV1XQVQ1:VQ
0846            QVYQYQ:VQ
0838            QVYQYQ:VQ
0546              QV2:VQ
0545              QV2:VQ
0467            QVYQYQ:VQ
0471          QV1XQVQ1:VQ
0466              QY:VQ
0490          QV1XQVQ1:VQ
0474            QVYQYQ:VQ
0472          QV1XQVQ1:VQ
0469            QVYQYQ:VQ
0489          QV1XQVQ1:VQ
0465             QVYQ1:VQ
0463          QV1XQVQ1:VQ
0491              QVYQ2:VQ
0464            QVYQYQ:VQ
0470            QVYQYQ:VQ
0473            QVYQYQ:VQ
0468            QVYQYQ:VQ
0492              QY:VQ
```

CARBOXYLIC ACIDS

0493	QVYQYQ:VQ	
0512	QV:VQ	
0044	QV1XQVQ1:VQ	
0041	QVYQYQ:VQ	
0086	QVYQYQ:VQ	
0134	QY:VQ	
0094	QV1XQVQ1:VQ	
0117	QVYQ1:VQ	
0087	QV1XQVQ1:VQ	
0301	QV2:VQ	
0298	QVYQYQ:VQ	
0296	QY:VQ	
0293	QVYQ1:VQ	
0297	QV1XQVQ1:VQ	
0868	T5M CNJ D1YZ:VQ	
0857	Z1:VQ	
0856	ZY:VQ	
0852	QY:VQ	
0859	ZV2YZ:VQ	
0849	QVYQYQ:VQ	
0862	QVYZ1:VQ	
0865	Z2YZ:VQ	
0875	T56 BMJ D1YZ:VQ	
0863	QVYZ2:VQ	
0861	T5MTJ 8:VQ	
0860	QY&YZ:VQ	
1120	QV1XQVQ1:VQ	
1119	QV1XQVQ1:VQ	
1114	QVYQ1:VQ	
1112	QVYQ1:VQ	
1118	QV1XQVQ1:VQ	
1113	QVYQ1:VQ	
0855	Z4YZ:VQ &GH	
0864	T5M CNJ D1YZ:VQ &GH	
0854	T5MTJ 8:VQ DQ	
0297	QV1XQ:VQ1VQ	
0087	QV1XQ:VQ1VQ	
0094	QV1XQ:VQ1VQ	
0044	QV1XQ:VQ1VQ	
1118	QV1XQ:VQ1VQ	
1120	QV1XQ:VQ1VQ	
1119	QV1XQ:VQ1VQ	
0463	QV1XQ:VQ1VQ	
0471	QV1XQ:VQ1VQ	
0472	QV1XQ:VQ1VQ	
0490	QV1XQ:VQ1VQ	
0489	QV1XQ:VQ1VQ	
0842	QV1XQ:VQ1VQ	
0840	QV1XQ:VQ1VQ	
1193	Q:VR	OTHER CARBONYL COMPOUNDS
0663	1:VR	
1037	E1:VR	
0898	E1:VR	
0015	G1:VR	
0120	E1:VR	

```
0252          E1:VR
0253          G1:VR
0383          20:VR
0424           Q:VR BOV1
0560           Q:VR CQ DQ EOVR CQ DQ EQ
0560  QVR CQ DQ EO:VR CQ DQ EQ
0151           5:VS1
0150           6:VS1
0280       L-15-:VTJ
1070          L6:VTJ
0640      T-18-0:VTJ
0612       L-15-:VTJ
1200         T50:VTJ
1201        T60 D:VTJ 8 CQ EQ
0647          L6:VTJ BY E
1186        L5V:VTJ C
1090       L-15-:VTJ C
1189         T60:VTJ CQ
1067        L6V C:VTJ E E
0756         T50:VTJ E2
0751         T50:VTJ E3
0752         T50:VTJ E4
0601         T50:VTJ E4
0652         T50:VTJ E5
0753         T50:VTJ E5
1030         T50:VTJ E5
1043         T50:VTJ E6
0622         T50:VTJ E6
0758         T50:VTJ E7
0757         T60:VTJ F3
0279         T60:VTJ F4
0274         T60:VTJ F5
0035         T60:VTJ F5
0694         T60:VTJ F5
0599         T60:VTJ F6
0618         T60:VTJ F7
1044         T60:VTJ F7
0746         T60:VTJ F9
0512           Q:VVQ                          Alpha-diketones
1186        L5:VVTJ C
1188       1VYQ:VV1
0792          1:VV1
0730          1:VV1
0793          1:VV1
0763          1:VV1
0627          1:VV1
0631          1:VV1
0635          1:VV1
1042          1:VV1
1039          1:VV1
1040          1:VV1
1041          1:VV1
0082          1:VV1
0081          1:VV1
0388          1:VV1
```

0190	Q:VXGG	Other carbonyls, carboxylic acids, etc.
0188	70:VY	
0159	60:VY	
0178	80:VY	
0157	2Y&10:VY	
1183	Q:VY	
0202	Q:VYOR	
1188	1:VYQVV1	
0300	Q:VYQYQVO &-KA-	
0442	Q:VYQYQVO &-KA-	
0849	Q:VYQYQVQ	
0298	Q:VYQYQVQ	
0041	Q:VYQYQVQ	
0086	Q:VYQYQVQ	
0838	Q:VYQYQVQ	
0846	Q:VYQYQVQ	
0493	Q:VYQYQVQ	
0468	Q:VYQYQVQ	
0474	Q:VYQYQVQ	
0469	Q:VYQYQVQ	
0473	Q:VYQYQVQ	
0464	Q:VYQYQVQ	
0470	Q:VYQYQVQ	
0467	Q:VYQYQVQ	
0465	Q:VYQ1VQ	
0844	Q:VYQ1VQ	
0839	Q:VYQ1VQ	
0117	Q:VYQ1VQ	
0293	Q:VYQ1VQ	
1112	Q:VYQ1VQ	
1114	Q:VYQ1VQ	
1113	Q:VYQ1VQ	
0491	Q:VYQ2VQ	
0450	T56 A ANTJ A GO:VYR&1Q	
1191	Q:VYU2 -T	
0871	Q:VYZY	
0873	Q:VYZY2	
0858	Q:VYZ1Q	
0874	Q:VYZ1R	
0867	Q:VYZ1VO &-NA-	
0862	Q:VYZ1VQ	
0876	Q:VYZ1Y	
0870	Q:VYZ2S1	
0866	Q:VYZ2VO &-NA-	
0863	Q:VYZ2VQ	
0565	Q:VYZ2VQ	
0566	Q:VYZ2VQ	
0872	Q:VYZ3MYZUM	
0869	Q:VYZ3MYZUM &GH	
1080	Q:VY2	
0437	Z:VZ	
0431	50:V1	Acetyl compounds
0436	20:V1	
0424	QVR 80:V1	
0432	50:V1	

0443	20:V1
0414	L6UTJ A E E F1U1:V1
0889	1Y20:V1
0363	7:V1
0374	1Y10:V1
0365	3:V1
0376	1X0:V1
0378	3Y0:V1
0364	6:V1
0373	1Y&Y0:V1
0377	2Y2&0:V1
0371	50:V1
0410	L6UTJ A E E F1U1:V1
0375	2X0:V1
0385	8:V1
0386	6:V1
0379	6:V1
0381	6:V1
0366	1:V1
0388	1V:V1
0380	6:V1
0372	2Y10:V1
0294	20:V1
0289	2:V1
0265	1Y20:V1
0276	20:V1
0281	1:V1
0283	5:V1
0340	11:V1
0341	9:V1
0343	50:V1
0344	50:V1
0342	8:V1
0119	Q:V1
0112	1:V1
0104	50:V1
0023	20:V1
0022	E:V1
0084	5:V1
0083	5:V1
0082	1V:V1
0081	1V:V1
0053	50:V1
0062	2:V1
0187	80:V1
0144	Q:V1
0146	Q:V1
0145	9:V1
1060	20V1:V1
1055	5:V1
1056	L6UTJ A E E F1U1:V1
1068	1Y1:V1
1039	1V:V1
1041	1V:V1
1016	L5TJ A0:V1

```
1013                                    2:V1
1040                                   1V:V1
1042                                   1V:V1
1024                                   50:V1
0983                                    Q:V1
0982                                    Q:V1
0976                                    1:V1
0936                                  1Y20:V1
0897                                    E1:V1
1172                                1Y&U3YU3:V1
1171                                 1YU2U1:V1
0585                                   2Y10:V1
0581                                    60:V1
0586                                    40:V1
0637                                    20:V1
0635                                    1V:V1
0654                                    5:V1
0627                                    1V:V1
0631                                    1V:V1
0634                                    20:V1
0648                                    5:V1
0668                                    8:V1
0703                                    2:V1
0690                                    6:V1
0699                                    Q:V1
0667                                    Q:V1
0669                                    1:V1
1196                                T5OJ 8:V1
1194                                   QV2:V1
1197                                T5MJ 8:V1
1188                                 1VYQV:V1
0843                                    20:V1
0763                                    1V:V1
0743                                    Q:V1
0792                                    1V:V1
0773                                    5:V1
0730                                    1V:V1
0761                                    20:V1
0793                                    1V:V1
0455                                    20:V1
0462                                    Q:V1
0186                              1Y&U3YU20:V1 -T
0090                            L6UTJ A 81U1:V1 C C
0347                            L6UTJ A 81U1:V1 C C
0345                            L6UTJ A 81U1:V1 C C
0558  L 8677 MV&T&J C01 D01 E01 JM:V1 N01                    Other carbonyls
0215                                    Q:V10R 8G DG
0317                                    Q:V10R 8G DG &-NA-
0533                                    0:V10R 8G DG &-NA-
0200                                    Q:V10R 8G DG EG
1198                                T5OJ 8:V1Q
1181                                    20:V1R
1238                                    5:V1U1
1237                                    4:V1U1
1235                                    2:V1U1
```

1236	3:V1U1
1234	1:V1U1
0693	20:V1U1
0101	20:V1U1
1104	5:V1U1
1164	2:V1U1
1103	5:V1U1
1057	20:V1U1R
1165	5:V1U2 -T
1060	20:V1V1
1119	Q:V1XQVQ1VQ
1120	Q:V1XQVQ1VQ
1118	Q:V1XQVQ1VQ
0094	Q:V1XQVQ1VQ
0087	Q:V1XQVQ1VQ
0044	Q:V1XQVQ1VQ
0297	Q:V1XQVQ1VQ
0840	Q:V1XQVQ1VQ
0842	Q:V1XQVQ1VQ
0490	Q:V1XQVQ1VQ
0463	Q:V1XQVQ1VQ
0489	Q:V1XQVQ1VQ
0472	Q:V1XQVQ1VQ
0471	Q:V1XQVQ1VQ
0830	50:V1Y
1184	Q:V1Y
0704	1:V1Y
0266	1Y&20:V1Y
0890	1Y&20:V1Y
0937	1Y&20:V1Y
0220	20:V1YV02&SPS&01&01
0626	Q:V10
0628	Q:V11
0136	Q:V11
1049	Q:V11
0629	Q:V12
0630	Q:V13
1051	Q:V13
0632	Q:V14
1050	Q:V15
0362	Q:V15
0633	Q:V16
1052	Q:V17
0361	Q:V17
0536	Q:V18
0531	Q:V19
0587	30:V2
0583	40:V2
1182	Q:V2
0160	70:V2
0181	60:V2
1022	60:V2
0301	Q:V2VQ
0545	Q:V2VQ
0546	Q:V2VQ

```
1194                Q:V2V1
0859                Z:V2YZVQ
0370                Q:V3
0355                Q:V3
0354                Q:V3
0421                Q:V3
0423                Q:V3
0238                Q:V3
0282                Q:V3
0143                Q:V3
0142                Q:V3
0975                Q:V3
0977                Q:V3
1012                Q:V3
0974                Q:V3
1011                Q:V3
1045                Q:V3
1062               50:V3
1084                Q:V3
0816                Q:V3
0483                Q:V3
0682                Q:V3
0706                Q:V3
0597               50:V4
0568                Q:V4
0834                Q:V4
0052               50:V4
0141                Q:V5
0140                Q:V5
0446                Q:V5
0990                Q:V5
1054                Q:V5
0991                Q:V5
0772                Q:V5
0711                Q:V5
0710                Q:V5
0616                Q:V5
0617                Q:V6
0619                Q:V7
0709                Q:V7
1047                Q:V7
0989                Q:V7
0139                Q:V7
0138                Q:V7
0621                Q:V8
1046                Q:V8U3U6 -CC
1048                Q:V9
0135                Q:V9
0137                Q:V9
0625                Q:V9
0724                Q:V9
0444  WNR RQ CNW EN:W
0320       L6TJ AN:W
0441   WNR B CNW EN:W DX
0425   WNR B CNW EN:W DX
```

NITRO OR OTHER DIOXO COMPOUNDS

```
0392        WNR B CNW EN:W DX
0393        WNR B CNW EN:W DX
0394        WNR B CNW EN:W DX
0391        WNR B CNW EN:W DX
0444           WNR BQ CN:W ENW
0441            WNR B CN:W ENW DX
0425            WNR B CN:W ENW DX
0393            WNR B CN:W ENW DX
0392            WNR B CN:W ENW DX
0391            WNR B CN:W ENW DX
0394            WNR B CN:W ENW DX
0440          WNR B D CN:W ENW FX
002B          WNR B D CN:W ENW FX
0906          WNR B D CN:W ENW FX
0957          WNR B D CN:W ENW FX
109B          WNR B D CN:W ENW FX
1096          WNR B D CN:W ENW FX
1096     WNR B D CNW EN:W FX
109B     WNR B D CNW EN:W FX
0906     WNR B D CNW EN:W FX
0957     WNR B D CNW EN:W FX
002B     WNR B D CNW EN:W FX
0440     WNR B D CNW EN:W FX
0814           T56 BS:WMVJ
0487           T56 BS:WMVJ
0479           T56 BS:WMVJ
0509                  :WNQ
0759                  :WNR
0708                  :WNR
0060                  :WNR
0962                  :WNR
0915                  :WNR
0441                  :WNR B CNW ENW DX
0425                  :WNR B CNW ENW DX
0393                  :WNR B CNW ENW DX
0391                  :WNR B CNW ENW DX
0394                  :WNR B CNW ENW DX
0392                  :WNR B CNW ENW DX
0440                  :WNR B D CNW ENW FX
002B                  :WNR B D CNW ENW FX
0906                  :WNR B D CNW ENW FX
0957                  :WNR B D CNW ENW FX
109B                  :WNR B D CNW ENW FX
1096                  :WNR B D CNW ENW FX
0510                  :WNR BQ
0444                  :WNR BQ CNW ENW
0203                  :WNR DOPS&D1&D1
0211                  :WNR DDPS&D2&D2
021B                  :WNR DOPS&R&D2
0815           T56 BS:WNVJ &-NA-
0064                  :WNXGGG
0312            GR DS:WDR DG
0505            GR DS:WDR DG
0554                  :WSQQ
0555                  :WSQQ
```

```
0303                                    :WSQQ
0318                                 1Y&SP:WSY &-KA-
0532                                   2SP:WS2 &-KA-
1110                                    :WS3&S1
1111                                    :WS3&S3
0541  T6 G656 B7 C6 E5 D 5ABCEF A& F:X *
0542  T6 G656 B7 C6 E5 D 5ABCFF A& F:X MNV*
0543  T6 G656 B7 C6 E5 D 5A8CEF A& F:X*
0544  T6 G656 B7 C6 E5 D 5ABCEF A& F:X*
1088  T6 G656 B7 C6 E5 D 5A8CEF A& F:X*
0437                                  ZV:Z
0452                                   .:Z&..G
0887                                    :ZH
0676                                    :ZH
0817                                 SUY:ZMR
0445                                 SUY:ZMR
0404                                    :ZR
0403                                    :ZR
0115                                    :ZR
0677                                    :ZR
0742                                    :ZR BVO1
0049                                    :ZR BVO1
0913                                    :ZR BVO1
0960                                    :ZR 8VO1
0872                              QVYZ3MY:ZUM
0869                              QVYZ3MY:ZUM &GH
0689                                    :ZVH
0859                                 ZV2Y:ZVQ
0860                                 QY&Y:ZVQ
0875                           T56 8MJ D1Y:ZVQ
0868                           T5M CNJ D1Y:ZVQ
0865                                 Z2Y:ZVQ
0855                                 Z4Y:ZVQ &GH
0864                           T5M CNJ D1Y:ZVQ &GH
0437                                    :ZVZ
0859                                    :ZV2YZVQ
0871                                 QVY:ZY
0856                                    :ZYVQ
0873                                 QVY:ZY2
0132                                    :Z1
0321                                    :Z1
0674                                    :Z1
0858                                 QVY:Z1Q
0874                                 QVY:Z1R
0867                                 QVY:Z1VO &-NA-
0857                                    :Z1VQ
0862                                 QVY:Z1VQ
0876                                 QVY:Z1Y
0870                                 QVY:Z2S1
0223                                 VHY:Z2S1
0098                                 VHY:Z2S1
0080                                 VHY:Z2S1
1001                                 VHY:Z2S1
0933                                    :Z2U1
0038                                    :Z2U1
```

QUATERNARY CARBON COMPOUNDS

AMINO AND AMIDO COMPOUNDS

0272	:Z2U1
0881	:Z2U1
0866	QVY:Z2VO &-NA-
0863	QVY:Z2VQ
0566	QVY:Z2VQ
0565	QVY:Z2VQ
0865	:Z2YZVQ
0872	QVY:Z3MYZUM
0869	QVY:Z3MYZUM &GH
0855	:Z4YZVQ &GH
0129	:1M1 — SIMPLE METHYL COMPOUNDS
0673	:1M1
0675	:1N1&1
0106	:1N1&1
0593	:1OR BQ CO1
0595	:1OR BQ CO1
0594	:1OR 8Q CO1
0213	:1OR DYXGGGR DO1
0720	:1R
0721	:1R
0439	:1R C
0131	:1R C E
0764	:1R D
0107	:1R X
1081	:1R X
0307	:1SPQO&S1
0222	:1SS1
0277	:1SS1
0089	:1SS1
0088	:1SS1
0176	:1SS1
1023	:1SS1
1015	:1SS1
0592	:1SS1
0288	:1SS1
0729	:1S1
0725	:1S1
0506	:1S1
1014	:1S1
1000	:1S1
0939	:1S1
0924	:1S1
0024	:1S1
0025	:1S1
0047	:1S1
0278	:1S1
0384	:1S1
0356	:1S1
0357	:1S1
0749	:1UYVO1
0326	:1UY1U1
0126	:1U1R
0716	:1U1R
0717	:1U1R
0664	:1U1R

```
0057    :1U2SS2U1
0882    :1U2SS2U1
0954    :1U2SS2U1
0951    :1U2S2U1
0886    :1U2S2U1
0054    :1U2S2U1
0247    :1U2S2U1
1212    :1U4U1
1221    :1U7U1
0688    :1VN1&1
0663    :1VR
0631    :1VV1
0635    :1VV1
0627    :1VV1
0730    :1VV1
0793    :1VV1
0792    :1VV1
0763    :1VV1
0082    :1VV1
0081    :1VV1
0388    :1VV1
1042    :1VV1
1040    :1VV1
1039    :1VV1
1041    :1VV1
1188    :1VYQVV1
0669    :1V1
0976    :1V1
0366    :1V1
0112    :1V1
0281    :1V1
1234    :1V1U1
0704    :1V1Y
0376    :1XOV1
0318    :1Y&SPWSY &-KA-
0770    :1Y&U3YU1&1U1
0767    :1Y&U3YU1&1U1
0186    :1Y&U3YU2OV1 -T
1172    :1Y&U3YU3V1
0179    :1Y&U3Y1U1
0152    :1Y&VO1Y
0184    :1Y&VO2UY&3UY -T
0373    :1Y&YOV1
0890    :1Y&2OV1Y
0266    :1Y&2OV1Y
0937    :1Y&2OV1Y
0892    :1Y&2S2Y
0021    :1Y&2S2Y
0796    :1YR
1035    :1YU1
1171    :1YU2U1V1
0374    :1Y1OV1
1068    :1Y1V1
0936    :1Y2OV1
0889    :1Y2OV1
```

0265	:1Y2OV1
0340	:11V1 — SIMPLE ETHYL COMPOUNDS
0258	:2-SE-H
0256	:2-SE-H
0001	:2-SE-H
0034	:2-SE-2
0398	:2H
0383	:2OVR
0443	:2OV1
0455	:2OV1
0436	:2OV1
0023	:2OV1
0294	:2OV1
0276	:2OV1
0761	:2OV1
0843	:2OV1
0637	:2OV1
0634	:2OV1
1181	:2OV1R
0693	:2OV1U1
0101	:2OV1U1
1057	:2OV1U1R
1060	:2OV1V1
0220	:2OV1YV02&SPS&01&01
0396	:2O2
0395	:2O2
1097	:2O2
0827	:2O2
0665	:2R
0507	:2R
0325	:2R
0309	:2SPQ0&S2
0532	:2SPWS2 &-KA-
0832	:2S2
0244	:2S2
0071	:2S2
0927	:2S2
0922	:2S2
0322	:2S2SP0&01&01 &&
0040	:2UY
0888	:2UY
0938	:2UY
0811	:2U1R CQ D02
0809	:2U1R CQ D02
0810	:2U1R CQ D02
0653	:2U1R D01
0981	:2U1R D01
0980	:2U1R D01
1107	:2U1SS1
1036	:2U2
0899	:2U2
0754	:2U2
0944	:2U2 -T
1213	:2U2U2 -CC
1214	:2U2U2 -CT

1215	:2U2U2 -TT
0153	:2U4U3V01
0185	:2V02UY&3UY -T
0062	:2V1
0289	:2V1
1013	:2V1
0703	:2V1
1235	:2V1U1
1164	:2V1U1
0375	:2X0V1
0157	:2Y&10VY
0953	:2Y&1S1Y2
0156	:2Y&1V01Y2
0790	:2YV02
0585	:2Y10V1
0372	:2Y10V1
0377	:2Y2&0V1
0587	:30V2 — SIMPLE PROPYL COMPOUNDS
1108	:3SS1U2
1105	:3SS2U1 &&
1106	:3SS3
0952	:3S3
0921	:3S3
0063	:3S3
0261	:3S3
0148	:3U1
0900	:3U1
0943	:3U1
0945	:3U1
0762	:3U1
1211	:3U2U1
1216	:3U3U1
0155	:3V01Y2
0339	:3V02
0315	:3V02
1064	:3V02
0760	:3V02
0582	:3V02
0623	:3V02
0584	:3V03
0365	:3V1
1236	:3V1U1
0378	:3Y0V1 — SIMPLE BUTYL COMPOUNDS
0397	:4H
0586	:40V1
0583	:40V2
0902	:4S4
0435	:4S4
0245	:4S4
0032	:4S4
0947	:4S4
1207	:4UU1
0745	:4U1
1219	:4U2U2
1218	:4U3U1

1020	:4U5V01	
1059	:4V02	
0336	:4V02	
0580	:4V02	
1237	:4V1U1	SIMPLE PENTYL COMPOUNDS
0343	:5OV1	
0344	:5OV1	
0053	:5OV1	
0104	:5OV1	
0431	:5OV1	
0432	:5OV1	
0371	:5OV1	
1024	:5OV1	
0830	:5OV1Y	
1062	:5OV3	
0052	:5OV4	
0597	:5OV4	
0831	:5S5	
1208	:5UU1	
1203	:5U1	
1217	:5U2U1	
0765	:5V02	
0306	:5V02	
0338	:5V02	
0151	:5VS1	
0084	:5V1	
0083	:5V1	
0283	:5V1	
1055	:5V1	
0773	:5V1	
0648	:5V1	
0654	:5V1	
1238	:5V1U1	
1104	:5V1U1	
1103	:5V1U1	
1165	:5V1U2 -T	SIMPLE HEXYL COMPOUNDS
0159	:6OVY	
0581	:6OV1	
0181	:6OV2	
1022	:6OV2	
1220	:6U2U1	
1222	:6U2U1	
0154	:6U3V01	
0189	:6V01	
0591	:6V02	
0150	:6VS1	
0381	:6V1	
0379	:6V1	
0380	:6V1	
0386	:6V1	
0364	:6V1	
0690	:6V1	
0188	:7OVY	SIMPLE HEPTYL COMPOUNDS
0160	:7OV2	
1204	:7U1	

0646	:7VO2
0636	:7VO2
0337	:7VO2
0363	:7V1
0178	:8OVY — SIMPLE OCTYL COMPOUNDS
0187	:8OV1
1209	:8UU1
1205	:8U1
0668	:8V1
0385	:8V1
0342	:8V1
1202	:9H — SIMPLE NONYL COMPOUNDS
1210	:9UU1
1102	:9UU1
1206	:9U1
0341	:9V1
0145	:9V1

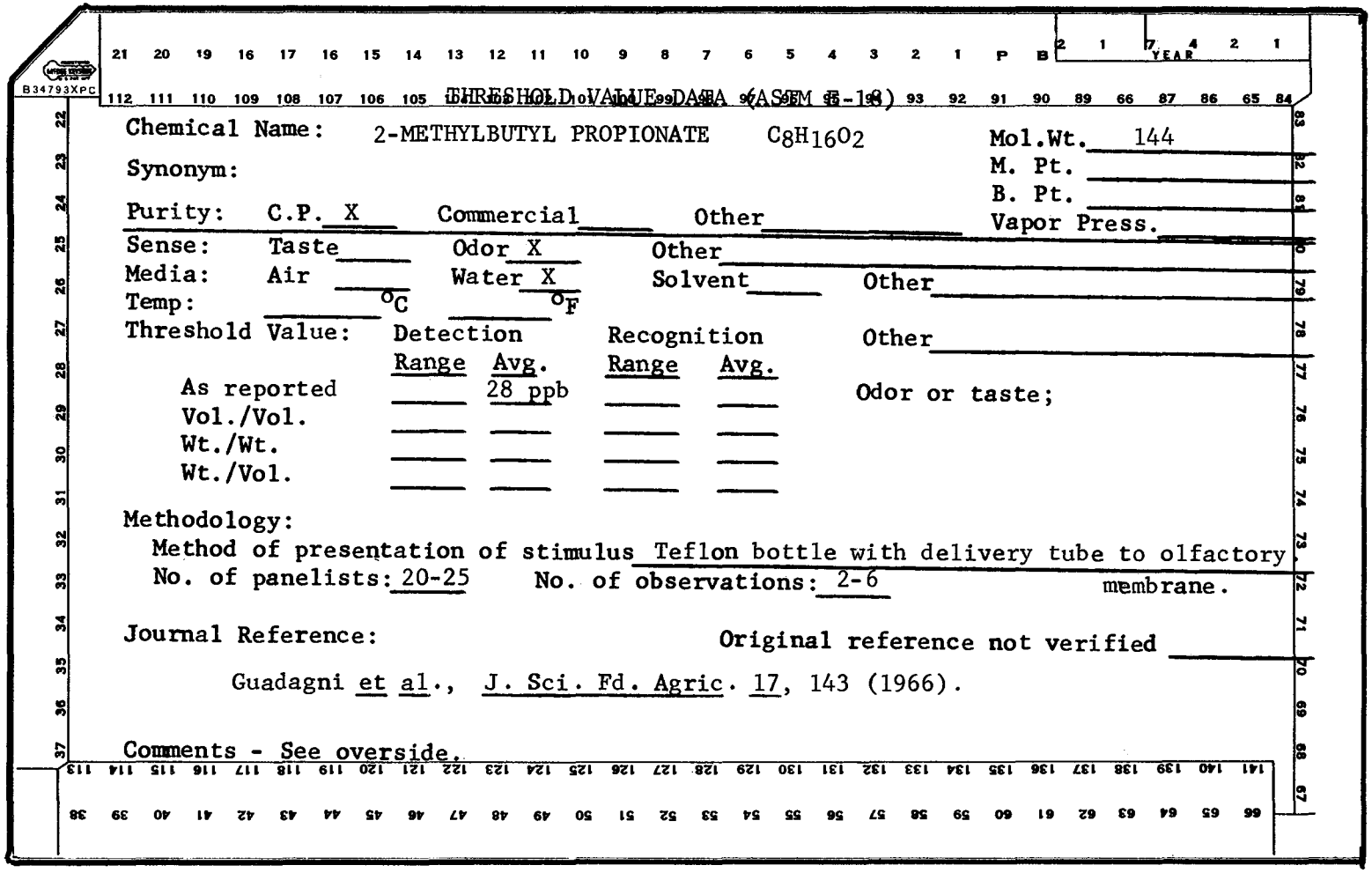

FIG. 1—*Data card for threshold values of pure compounds.*

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TO: American Society for Testing and Materials
1916 Race Street, Philadelphia, Pa. 19103
Attn: Comm. E-18; Threshold Values Data

Dear Sirs:

I would like to suggest the following for improvement or up-dating of the compilation of Odor and Taste Threshold Data.

1. New Data: Journal reference — Reprint included ☐

2. Correction: — Reprint included ☐

3. "Missed" data — Reprint included ☐

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