



Standard Specification for Color Coding of Reusable Laboratory Pipets¹

This standard is issued under the fixed designation E1273; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers a system of color coding for one-mark pipets for identification of nominal capacities, and for graduated pipets for identification of nominal capacities and units of sub-division.

1.2 This specification applies to one-mark and graduated pipets of the nominal capacities listed in [Table 1](#) and [Table 2](#), respectively.

NOTE 1—Many pipets not covered by other ASTM standards are included in [Table 1](#) and [Table 2](#), in order, firstly, to ensure uniformity of color coding as far as possible for non-standard as well as standard pipets and, secondly, to reserve suitable codes for possible future standards for other types of pipet.

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

[E1157 Specification for Sampling and Testing of Reusable Laboratory Glassware](#)

¹ This specification is under the jurisdiction of ASTM Committee E41 on Laboratory Apparatus and is the direct responsibility of Subcommittee E41.01 on Apparatus

Current edition approved Nov. 1, 2013. Published December 2013. Originally approved in 1988. Last previous edition approved in 2008 as E1273–88 (2008). DOI: 10.1520/E1273-88R13.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

3. Significance and Use

3.1 The purpose of this specification is to ensure that if a color code is used on pipets, all manufacturers will use the same code; it is not intended as an encouragement of color coding if this is not required.

4. Color Properties

4.1 *Coding*—The color coding used on one-mark pipets shall be in accordance with [Table 1](#), and graduated pipets shall be in accordance with [Table 2](#).

4.2 *Variations*—Variations in the enamels used in the methods of application appropriate for pipets made from different types of glass inevitably result in minor variations of color, and it is therefore not appropriate to specify closely the seven colors listed in the tables.

5. Marking Requirements

5.1 The color code shall take the form of color bands extending at least 150° around the circumference of the pipet and situated not more than 70 mm from the top of the pipet and not less than 20 mm above the nearest graduation line.

5.2 For a code consisting of a single band of color, the band shall be 5 to 10 mm wide. For a code consisting of two bands of color, each band shall be 3 to 5 mm wide and the two bands shall be separated by a space of 2 to 3 mm. Color bands do not have to be continuous but may be broken as long as they cover 40 % of the circumference of the pipet.

NOTE 2—Pipets calibrated to deliver by blowing out the last drop shall be identified by a wide band or two narrow bands permanently marked on their top end.

6. Sampling and Testing

6.1 Sampling and testing shall be in accordance with Specification [E1157](#).

7. Keywords

7.1 colorcoding; laboratory; pipets

TABLE 1 Coding System for One-Mark Pipets

Nominal Capacity, mL	Color Code Bands
0.001	1 blue
0.002	2 red
0.003	1 yellow
0.004	2 green
0.005	1 white
0.01	1 orange
0.015	2 blue
0.02	1 black
0.025	2 white
0.03	2 yellow
0.035	2 black
0.04	2 red
0.05	1 green
0.075	2 orange
0.1	1 blue
0.15	1 white
0.2	1 red
0.25	2 green
0.3	1 yellow
0.4	2 red
0.5	2 black
1	1 blue
2	1 orange
3	1 black
4	2 red
5	1 white
6	2 orange
7	2 green
8	1 blue
9	1 black
10	1 red
15	1 green
20	1 yellow
25	1 blue
30	1 black
40	1 white
50	1 red
75	1 green
100	1 yellow
150	2 black
200	1 blue

TABLE 2 Coding System for Graduated Pipets

Nominal Capacity, mL	Sub-division, mL	Color Code Bands
0.01	0.001	1 blue
0.05	0.001	1 yellow
0.1	0.001	2 green
...	0.005	1 red
...	0.01	1 white
...	0.05	2 orange
0.125	0.0125	2 yellow
0.2	0.001	2 blue
...	0.002	2 white
...	0.01	1 black
...	0.1	1 orange
0.5	0.005	1 green
...	0.01	2 yellow
...	0.02	2 red
...	0.05	2 black
...	0.25	2 green
1	0.01	1 yellow
...	0.05	2 green
...	0.1	1 red
1.5	0.01	2 red
2	0.01	2 white
...	0.02	1 black
...	0.05	2 orange
...	0.1	1 green
3	0.01	2 blue
5	0.05	1 red
...	0.1	1 blue
10	0.1	1 orange
15	0.1	2 green
20	0.1	2 yellow
25	0.1	1 white
...	0.2	1 green
50	0.1	2 orange
...	0.2	1 black
100	0.2	1 red

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the ASTM website (www.astm.org/COPYRIGHT/).