INTERNATIONAL STANDARD



2496

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION -МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ -ORGANISATION INTERNATIONALE DE NORMALISATION

sec Butyl alcohol for industrial use — List of methods of test

First edition - 1973-12-15

UDC 661.725.4:543

Ref. No. ISO 2496-1973 (E)

Descriptors: butanols, tests.

FOREWORD

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Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2496 was drawn up by Technical Committee ISO/TC 47, Chemistry, and circulated to the Member Bodies in September 1971.

It has been approved by the Member Bodies of the following countries:

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Austria **Belgium** Egypt, Arab Rep. of France

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The Member Body of the following country expressed disapproval of the document on technical grounds:

New Zealand*

Disapproved section 4.

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Printed in Switzerland

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1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies methods of test for secbutyl alcohol (butan-2-ol) (CH₃CH₂CH(OH)CH₃), for industrial use.

If it is necessary to seal this bottle care shall be taken to avoid the risk of contamination of its contents.

2 REFERENCES

ISO/R 758, Method for the determination of density of liquids at 20 °C.

ISO/R 759, Method for the determination of residue on evaporation on a water bath.

ISO/R 760, Determination of water by the Karl Fischer method.

ISO/R 918, Test method for distillation (distillation yield and distillation range).

ISO 2211, Liquid chemical products — Measurement of colour in Hazen units (platinum-cobalt scale).

ISO 2887, secButyl alcohol, methyl ethyl ketone, isobutyl methyl ketone isoamyl ethyl ketone, diacetone alcohol and hexylene glycol for industrial use — Determination of acidity to phenolphthalein — Volumetric method,

3 SAMPLING

Follow the principles given in ISO...1). Attention is drawn to the following recommendation: place the laboratory sample, representative of the material taken from the bulk, in a clean, dry, dark coloured, glass-stoppered bottle of such a size that it is nearly filled by the sample.

4 DETERMINATION OF DISTILLATION CHARACTERISTICS

Use the method specified in ISO/R 918, subject to the following modifications appropriate for secbutyl alcohol.

4.1 Thermometer. (See clause 3.2 in ISO/R 918.)

Use a thermometer conforming to the requirements of ISO/R 918, with a scale including the range 75 to 125 °C.

4.2 Distillation. (See clause 6.1 in ISO/R 918.)

The interval before the first drop of distillate falls from the end of the condenser shall be 10 to 15 min.

4.3 Correction to be applied to the temperature. (See clause 7.2 in ISO/R 918.)

The correction is equal to

 $0.035 (760 - p_1)$ °C

0,026 (1

 $0,026 (1 013 - p_2)$ °C

where

or

p₁ is the barometric pressure, in millimetres of mercury;

 p_2 is the barometric pressure, in kilopascals.²⁾

¹⁾ In preparation.

²⁾ $1 \text{ kPa} = 1 \text{ kN/m}^2$.

5 DETERMINATION OF DENSITY AT 20 °C

Use the method specified in ISO/R 758.

6 DETERMINATION OF RESIDUE ON EVAPORATION ON A WATER BATH

Use the method specified in ISO/R 759.

7 DETERMINATION OF WATER CONTENT

Use any of the methods specified in ISO/R 760.

8 MEASUREMENT OF COLOUR

Use the method specified in ISO 2211.

9 DETERMINATION OF ACIDITY TO PHENOL-PHTHALEIN

Use the method specified in ISO 2887.

10 TEST REPORT

The test report shall include the following particulars in relation to each test:

- a) the reference of the method used;
- b) the results and the method of expression used;
- c) any unusual features noted during the determination;
- d) any operation not included in this International Standard or those documents to which reference is made, or regarded as optional.