

Propan-2-ol (isopropyl alcohol) for industrial use —

Part 1: Specification for propan-2-ol (isopropyl alcohol)

UDC 661.725.2:547.263

Confirmed
January 2011

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Chemicals Standards Committee (CIC/-) to Technical Committee CIC/51, upon which the following bodies were represented:

British Pharmacopoeia Commission
 British Society of Perfumers
 Chemical Industries Association
 Department of Trade and Industry (Laboratory of the Government Chemist)
 Royal Society of Chemistry

This British Standard, having been prepared under the direction of the Chemicals Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 October 1986

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First published as BS 1595
 March 1950
 First revision March 1957
 Second revision June 1965
 (later amended to Part 1)
 Third revision as BS 1595-1
 October 1986

The following BSI references relate to the work on this standard:
 Committee reference CIC/51
 Draft for comment 85/50953 DC

ISBN 0 580 15362 2

Amendments issued since publication

Amd. No.	Date of issue	Comments

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Foreword

This Part of BS 1595, which has been prepared under the direction of the Chemicals Standards Committee, comprises a specification for propan-2-ol (previously known as isopropyl alcohol) to meet the requirements of a wide range of industrial users. It does not, however, apply to material for medicinal use, requirements for which are included in the British Pharmacopoeia, or to material sold as “isopropyl alcohol azeotrope”.

First published in 1950, BS 1595 was last revised in 1965 and was subsequently amended to become BS 1595-1.

In the present edition of BS 1595-1, a requirement for colour has been introduced and the requirement for relative density has been replaced by one for density at 20 °C. In addition, the test methods associated with the specification are now published separately as BS 1595-2.

This standard supersedes BS 1595-1:1965, which is withdrawn.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 and 2, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies requirements for propan-2-ol suitable for industrial purposes. It does not apply to material for medicinal use or to material sold as "isopropyl alcohol azeotrope".

NOTE The titles of the publications referred to in this standard are listed on the inside back page.

2 Description

The material shall be clear and free from matter in suspension, as assessed by visual inspection, and shall consist essentially of propan-2-ol (CH₃)₂CHOH.

3 Sampling and size of sample

A sample of not less than 1 L shall be taken in accordance with BS 1595-2.

4 Colour

The colour of the material shall not exceed 15 Hazen units when measured as described in BS 5339.

5 Density

The density of the material at 20 °C shall be not lower than 0.785 g/mL and not higher than 0.787 g/mL when determined as described in BS 4522.

6 Distillation range

When the material is distilled as described in BS 4591, modified as specified in BS 1595-2, the initial boiling point at 1013 mbar¹⁾ pressure shall be not lower than 81.5 °C and the dry point at 1013 mbar pressure shall be not higher than 83.0 °C.

7 Residue on evaporation

The residue on evaporation of the material shall not exceed 0.002 % (*m/m*) when determined as described in BS 4524.

8 Miscibility with water

The material shall not show opalescence when tested as described in BS 1595-2.

9 Water content

The material shall not contain more than 0.50 % (*m/m*) of water when determined as described in clause 3 of BS 2511:1970, using 20 mL of the material.

10 Alkalinity or acidity

The material shall not be alkaline to phenolphthalein and shall not contain more than 0.002 % (*m/m*) of acid, calculated as acetic acid (CH₃COOH) and determined as described in BS 1595-2.

11 Aldehydes and ketones

The material shall not contain more than 0.10 % (*m/m*) of aldehydes and ketones, calculated as acetone (CH₃COCH₃) and determined as described in BS 1595-2.

¹⁾ 1 mbar = 100 N/m² = 100 Pa.

Publications referred to

BS 1595, *Propan-2-ol (isopropyl alcohol) for industrial use.*

BS 1595-2, *Methods of test.*

BS 2511, *Methods for the determination of water (Karl Fischer method).*

BS 4522, *Method for the determination of density of liquids at 20 °C.*

BS 4524, *Method for determination of residue on evaporation on a water bath.*

BS 4591, *Method for the determination of distillation characteristics.*

BS 5339, *Method of measurement of colour in Hazen units (platinum-cobalt scale) of liquid chemical products.*

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