BS 508-1:1986

Butan-1-ol for industrial use —

Part 1: Specification for butan-1-ol

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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

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Amendments issued since publication

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Contents

Foreword

This Part of BS 508, which has been prepared under the direction of the Chemicals Standards Committee, comprises a specification for butan-1-ol to meet the requirements of a wide range of industrial users.

BS 508 was first published in 1933 and last revised in 1966. In the present edition, the requirements for distillation range and water content have been made more stringent. The requirement for flash point has been deleted and the requirement for relative density has been replaced by one for density at 20 °C.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 508-2.

This standard supersedes BS 508-1:1966, which is withdrawn.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 Part of BS 508 specifies requirements for butan-1-ol suitable for industrial purposes.

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

2 Description

The material shall be clear and free from matter in suspension, as assessed by visual inspection, and shall consist essentially of butan-1-ol, $CH_3CH_2CH_2CH_2OH$.

3 Sampling and size of sample

A sample of not less than 1 L shall be taken in accordance with BS 508-2.

4 Colour

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

5 Density

The density of the material at 20 °C shall be not lower than 0.809 g/mL and not higher than 0.811 g/mL when determined by the method described in BS 4522.

6 Distillation range

When the material is distilled by the method described in BS 4591, modified as specified in BS 508-2, the initial boiling point at 1 013 mbar[1)] pressure shall be not below 116.5 °C and the dry point at 1 013 mbar pressure shall be not above 119.0 °C.

7 Water content

The material shall not contain more than 0.10 % (*m*/*m*) of water when determined by the method described in clause **2** of BS 2511:1970, using 20 mL of the material.

8 Residue on evaporation

The residue on evaporation of the material shall not exceed 0.005 % (*m*/*m*) when determined by the method described in BS 4524.

9 Acidity

The material shall not contain more than 0.005 % (*m*/*m*) of acid, calculated as butyric acid (C_3H_7COOH) and determined by the method described in BS 508-2.

10 Aldehydes and ketones

The material shall not contain more than 0.20 % (*m*/*m*) of aldehydes and ketones, calculated as butyraldehyde (C_3H_7CHO) and determined by the method described in BS 508-2.

[1)] 1 mbar = 100 N/m^2 = 100 Pa.

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Publications referred to

BS 508, *Butan-1-ol for industrial use.*

BS 508-2, *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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