

Methods of

# Sampling and test for sodium carbonate for industrial use —

Part 0: General introduction

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Confirmed  
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## Cooperating organizations

The Chemicals Standards Committee, under whose direction this British Standard was prepared, consists of representatives from the following:

Association of Fatty Acid Distillers  
 British Tar Industry Association  
 Chemical Industries Association\*  
 Chemical Society (Analytical Division)  
 Consumer Standards Advisory Committee of BSI  
 Department of Health and Social Security  
 Department of Industry (Laboratory of the Government Chemist)  
 Fertiliser Manufacturers' Association Ltd.  
 Hydrocarbon Solvents Association  
 Ministry of Agriculture, Fisheries and Food  
 Ministry of Defence\*  
 National Sulphuric Acid Association  
 Paintmakers' Association of Great Britain Ltd.  
 Royal Institute of Public Health and Hygiene  
 Soap and Detergent Industry Association\*  
 Standardization of Tar Products Tests Committee

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the Technical Committee entrusted with the preparation of this British Standard:

Asbestos Cement Manufacturers' Association Limited  
 British Man-made Fibres Federation  
 British Textile Employers' Association  
 Fabric Care Research Association  
 Society of Glass Technology

This British Standard, having been prepared under the direction of the Chemicals Standards Committee, was published under the authority of the Executive Board and comes into effect on 27 February 1981

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The following BSI reference relates to the work on this standard:  
 Committee reference CIC/22

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### Amendments issued since publication

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# Foreword

This British Standard has been prepared under the direction of the Chemicals Standards Committee and provides, in separate Parts, a comprehensive series of test methods for sodium carbonate for industrial use. Although applicable to the material in general, it includes all the test methods required to assess compliance with the requirements of BS 3674. The latter specification is in the process of being revised and, in accordance with current BSI policy, will no longer include test methods which in the 1963 edition are given in appendices.

In preparing this standard, the opportunity has been taken to implement, without alteration, the majority of the International Standards describing test methods for sodium carbonate. These have been prepared, with the active participation of the UK, by Sub-committee 5 of Technical Committee 47, Chemistry, of the International Organization for Standardization (ISO). Although all such Parts are applicable to the material in general, most of them also relate to requirements of BS 3674 and replace the corresponding methods appended to that standard. There are, however some test requirements in the specification for which there are no corresponding International Standards and, in these cases, the relevant test methods from BS 3674:1963, have been included, technically unchanged, as Parts 6 and 7 of this standard.

In this Part of BS 6070, Table 1 gives the relationship of the other Parts of the standard to the corresponding International Standards. This Part also includes information on sampling which is technically equivalent to that in ISO 739 "*Sodium carbonate for industrial use — Preparation and storage of test samples*".

## Additional information

*Ethanol.* The ethanol used in these determinations may be replaced for these purposes by industrial methylated spirits, 95 % (V/V), complying with the requirements of BS 3591. It should be noted that the use of industrial methylated spirits is governed by The Methylated Spirits Regulations, 1952 (S.I. 1952, No 2230) as amended by The Alcoholic Liquors (Amendment of Units and Methods of Measurement) Regulations 1979 (S.I. 1979, No 1149). It is not permissible to use duty-free ethanol, received under the provisions of the Alcoholic Liquor Duties Act 1979, Section 10, for purposes for which industrial methylated spirits is an acceptable alternative to ethanol.

*Sampling.* A representative sample of the material, weighing not less than 500 g is required to carry out the tests in this series except for the anhydrous material where a total sample of 2 kg is needed if it is also required to determine the pouring density. The sample should be transferred immediately to a clean, dry, moisture-resistant container, which should be of such a size that it is nearly filled by the sample.

NOTE Additional guidance on sampling is given in BS 5309-1 and BS 5309-4.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

## 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.

**Table 1 — Methods of test for sodium carbonate: relationship between BS and international series**

BS 6070 Part no	Corresponding International Standard no	Subject	Type of determination	Relationship of International Standard to BS test method
0	—	General introduction (including sampling)	—	Includes the sampling requirements of ISO 739
—	739	Preparation and storage of test samples	—	Not to be implemented
1	740	Total soluble alkali content	Titrimetric	Identical
—	741	Sodium hydrogen carbonate content	Titrimetric	Disapproved by UK
2	742	Chloride content	Mercurimetric	Identical
—	743	Sulphate content	Gravimetric	Disapproved by UK
—	744 <sup>a</sup>	Iron content	Photometric (1,10-phenanthroline)	
3	745	Non-volatile matter	—	Identical
4	746	Matter insoluble in water	—	Identical
5	5143	Sulphate content	Reduction and titrimetry	Identical
6	—	Pouring density	—	No equivalent International Standard
7	—	Copper content	Photometric	No equivalent International Standard

<sup>a</sup> In course of preparation.



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## Publications referred to

BS 3591, *Industrial methylated spirits*.

BS 3674, *Sodium carbonate (technical grades)*.

BS 5309, *Methods of sampling chemical products*.

BS 5309-1, *Introduction and general principles*.

BS 5309-4, *Sampling of solids*.

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