

Methods of

Sampling and test for sodium hydroxide for industrial use —

Part 14: Determination of matter insoluble in water

NOTE It is recommended that this Part be read in conjunction with the information in the “*General introduction*”, published separately as BS 6075-0.

UDC 661.322.1:546.33 – 36:543.721

Confirmed January 2011

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.

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

© BSI 11-1999

The following BSI reference relates to the work on this standard:

Committee reference CIC/22

ISBN 0 580 12064 3

Amendments issued since publication

Amd. No.	Date of issue	Comments

Contents

	Page
1 Scope	1
2 References	1
3 Principle	1
4 Reagents	1
5 Apparatus	1
6 Procedure	1
7 Expression of results	1
Publications referred to	Inside back cover

1 Scope

This British Standard describes a method of test for the determination of matter insoluble in water for sodium hydroxide for industrial use.

There is no corresponding International Standard for this method.

2 References

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

3 Principle

A solution of the test portion is filtered through a tared filter crucible and the mass of the water-insoluble residue is determined.

4 Reagents

Water complying with the requirements of BS 3978 shall be used throughout.

5 Apparatus

Ordinary laboratory apparatus and the following are required.

5.1 Oven, capable of being controlled within the temperature range 100 °C to 105 °C.

5.2 Crucible, sintered glass or porous porcelain, of porosity grade no. 4, complying with the requirements of BS 1752. Use a crucible for the determination which has been pre-treated as follows.

Filter 200 ml of approximately 100 g/l sodium hydroxide solution slowly through the crucible. Rinse thoroughly with water to ensure that any loose particles and all the residual sodium hydroxide solution is removed. Dry in the oven (5.1), controlled within the temperature range 100 °C to 105 °C, for 1 h and allow to cool in a desiccator.

NOTE The crucible may be used for subsequent determinations without further pretreatment.

6 Procedure

6.1 Test portion. Weigh, to the nearest 0.1 g in a plastics weighing bottle fitted with a cover, 50 g of the sample.

6.2 Determination. Transfer the test portion (6.1) to a 400 ml beaker and add about 250 ml of water. When dissolution of the test portion is complete, allow the solution to cool to room temperature and then filter it through the clean dry crucible (5.2) previously weighed to the nearest 0.1 mg, transferring any insoluble matter into the crucible with a jet of water. Wash the crucible five times with 5 ml portions of water at room temperature. Dry the crucible and contents for 1 h in the oven (5.1), controlled at 100 °C to 105 °C, allow it to cool in a desiccator and weigh it to the nearest 0.1 mg.

7 Expression of results

The matter insoluble in water, expressed as a percentage by mass, is given by the formula:

$$\frac{m_1 \times 100}{m_0}$$

where

m_0 is the mass of the test portion (in g)

m_1 is the mass of the matter insoluble in water (in g).

Publications referred to

BS 1752, *Laboratory sintered or fritted filters.*

BS 3978, *Water for laboratory use.*

BSI — British Standards Institution

BSI is the independent national body responsible for preparing British Standards. It presents the UK view on standards in Europe and at the international level. It is incorporated by Royal Charter.

Revisions

British Standards are updated by amendment or revision. Users of British Standards should make sure that they possess the latest amendments or editions.

It is the constant aim of BSI to improve the quality of our products and services. We would be grateful if anyone finding an inaccuracy or ambiguity while using this British Standard would inform the Secretary of the technical committee responsible, the identity of which can be found on the inside front cover. Tel: 020 8996 9000. Fax: 020 8996 7400.

BSI offers members an individual updating service called PLUS which ensures that subscribers automatically receive the latest editions of standards.

Buying standards

Orders for all BSI, international and foreign standards publications should be addressed to Customer Services. Tel: 020 8996 9001. Fax: 020 8996 7001.

In response to orders for international standards, it is BSI policy to supply the BSI implementation of those that have been published as British Standards, unless otherwise requested.

Information on standards

BSI provides a wide range of information on national, European and international standards through its Library and its Technical Help to Exporters Service. Various BSI electronic information services are also available which give details on all its products and services. Contact the Information Centre. Tel: 020 8996 7111. Fax: 020 8996 7048.

Subscribing members of BSI are kept up to date with standards developments and receive substantial discounts on the purchase price of standards. For details of these and other benefits contact Membership Administration. Tel: 020 8996 7002. Fax: 020 8996 7001.

Copyright

Copyright subsists in all BSI publications. BSI also holds the copyright, in the UK, of the publications of the international standardization bodies. Except as permitted under the Copyright, Designs and Patents Act 1988 no extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – without prior written permission from BSI.

This does not preclude the free use, in the course of implementing the standard, of necessary details such as symbols, and size, type or grade designations. If these details are to be used for any other purpose than implementation then the prior written permission of BSI must be obtained.

If permission is granted, the terms may include royalty payments or a licensing agreement. Details and advice can be obtained from the Copyright Manager. Tel: 020 8996 7070.