

Methods of

Test for sodium fluoride for industrial use —

Part 6: Determination of silica content

[ISO title: Sodium fluoride primarily used for the production of aluminium — Determination of silica content — Reduced molybdosilicate spectrophotometric method]

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Cooperating organizations

The Chemicals Standards Committee, under whose direction this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

- 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 committee entrusted with the preparation of this British Standard:

- Aluminium Federation
- British Ceramic Research Association
- Royal Institute of Chemistry

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 30 April 1980

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The following BSI references relate to the work on this standard:
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Contents

	Page
Cooperating organizations	Inside front cover
National foreword	ii
1 Scope and field of application	1
2 Reference	1
3 Principle	1
4 Reagents	1
5 Apparatus	2
6 Procedure	2
7 Expression of results	4
8 Test report	4
Annex ISO Publications relating to sodium fluoride for industrial use and sodium fluoride primarily used for the production of aluminium	5
Publications referred to	Inside back cover

National foreword

WARNING NOTE. Sodium fluoride is toxic and is irritant, particularly in the form of dust. Carry out operations involving its use in a fume cupboard and wear suitable protective clothing to prevent inhalation of the dust and contact with the eyes, skin and clothing.

This British Standard has been prepared under the direction of the Chemicals Standards Committee in order to provide methods for the analysis of sodium fluoride for industrial use. For some years the United Kingdom has participated in the work of preparing methods of test applicable to this material, organized by Subcommittee 7 (formerly WG 8), Aluminium oxide and related compounds, of Technical Committee 47, Chemistry, of the International Organization for Standardization (ISO). As international agreement is reached on the methods, it is proposed to publish them as Parts of this British Standard.

This Part is identical with ISO 3430 “Sodium fluoride primarily used for the production of aluminium — Determination of silica content — Reduced molybdosilicate spectrophotometric method”.

Terminology and conventions. The text of the International Standard has been approved as suitable for publication, without deviation, as a British Standard. Some terminology and certain conventions are not identical with those used in British Standards; attention is especially drawn to the following.

The comma has been used throughout as a decimal marker. In British Standards, it is current practice to use a full point on the baseline as the decimal marker.

Where the words “International Standard” appear, referring to this standard, they should be read as “British Standard”.

Cross-references

International Standard	Corresponding British Standard
	BS 5072 <i>Methods of test for sodium fluoride for industrial use</i>
ISO 3428:1976	Part 4:1980 <i>Preparation and storage of test samples</i> (Identical)
ISO 3429:1976 ¹⁾	Part 5:1980 <i>Determination of iron content</i> (Identical)
ISO 3431:1976 ¹⁾	Part 7:1980 <i>Determination of soluble sulphates content</i> (Identical)
ISO 3566:1976 ¹⁾	Part 8:1980 <i>Determination of chlorides content</i> (Identical)
ISO 4278:1977 ¹⁾	Part 9:1980 <i>Determination of carbonate content</i> (Identical)

Related British Standards for ISO 2831¹⁾, ISO 2832¹⁾ and ISO 2833¹⁾ are BS 5072-1, BS 5072-2 and BS 5072-3 respectively.

NOTE The title and clause 1 of ISO 3429, ISO 3430, ISO 3431, ISO 3566 and ISO 4278 (see the Annex) state that the sodium fluoride is “primarily used for the production of aluminium”. This is incorrect, at least for the United Kingdom. This has been brought to the attention of ISO Technical Committee 47, in a proposal to amend the International Standards concerned.

Additional information

Water. Water complying with the requirements of clause 4 is specified in BS 3978 “Water for laboratory use”.

¹⁾ Referred to in the Annex, for information only.

Nitric acid, ρ approximately 1.42 g/ml, about 70 % (m/m) solution, which is the corresponding reagent normally obtainable in the United Kingdom, is suitable for use in place of the approximately 1.40 g/ml solution specified in 4.3.

This standard prescribes methods of test only, and should not be used or quoted as a specification defining limits of purity. Reference to the standard should indicate that the methods of test used comply with the requirements of BS 5072-6.

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 to iv, pages 1 to 6, 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.