

Methods of test for

**Sodium
tripolyphosphate
(*pentasodium*
triphosphate) and
sodium pyrophosphate
(*tetrasodium*
pyrophosphate) for
industrial use —**

**Part 12: Condensed phosphates for
industrial use (including foodstuffs) —
Determination of arsenic content —
Silver diethyldithiocarbamate
photometric method**

UDC 661.833.456 + 661.833.458:546.33'185:543.062:546.19

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:

- Campden Food Preservation Research Association
- Flour Milling and Baking Research Association
- Institute of Metal Finishing
- Institution of Water Engineers and Scientists
- National Association of Soft Drinks Manufacturers
- Society of Chemical Industry
- Textile Institute

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 28 September 1979

© BSI 11-1999

The following BSI references relate to the work on this standard:
Committee reference CIC/25
Draft for comment 77/50618 DC

ISBN 0 580 10853 8

Amendments issued since publication

Amd. No.	Date of issue	Comments

Contents

	Page
Cooperating organizations	Inside front cover
National foreword	ii
1 Scope and field of application	1
2 References	1
3 Principal	1
4 Reagents	1
5 Apparatus	1
6 Procedure	1
7 Expression of results	1
8 Test report	2
Annex ISO publications relating to condensed sodium phosphates for industrial use (including foodstuffs)	3
Publications referred to	Inside back cover

National foreword

This British Standard has been prepared under the direction of the Chemicals Standards Committee in order to provide methods for the analysis of condensed phosphates for industrial use (including foodstuffs).

This Part is identical with ISO 5372 “*Condensed phosphates for industrial use (including foodstuffs) — Determination of arsenic content — Silver diethyldithiocarbamate photometric method*”.

For some years the UK has participated in the work of preparing methods of test applicable to phosphoric acid for industrial use, organized by subcommittee 6 (formerly working group 7) “Phosphoric acid and condensed phosphates” 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.

The Parts of BS 4427 which are currently available are as follows.

— *Part 1: Determination of matter insoluble in water in sodium tripolyphosphate;*

[Technically equivalent to ISO/R 850]

— *Part 2: Measurement of pH value of sodium tripolyphosphate;*

[Technically equivalent to ISO/R 851]

— *Part 3: Determination of iron content;*

[Technically equivalent to ISO/R 852]

— *Part 4: Determination of loss on ignition;*

[Technically equivalent to ISO/R 853]

— *Part 5: Determination of particle size distribution;*

[Technically equivalent to ISO 2996]

— *Part 6: Estimation of pyrophosphate content of sodium pyrophosphate;*

[Technically equivalent to ISO 2999]

— *Part 7: Estimation of tripolyphosphate (triphosphate) content of sodium tripolyphosphate;*

[Technically equivalent to ISO 3000]

— *Part 8: Determination of orthophosphate content;*

[Technically equivalent to ISO 2998]

— *Part 9: Determination of fluorine content;*

[Related to ISO 3360]

— *Part 10: Determination of total phosphorus (V) oxide content: quinoline phosphomolybdate gravimetric method;*

[Identical with ISO 3357]

— *Part 11: Separation by column chromatography and determination of the different phosphate forms.*

[Identical with ISO 3358]

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 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. The references given in parentheses in the text, in some cases refer to clauses in ISO 2950, the corresponding International Standard to BS 4404 and in others to clauses in this British Standard.