# Ammonium nitrate —

Part 0: General introduction

UDC 661.525:546.39'175:543



# Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Chemicals Standards Committee (CIC/-) to Technical Committee CIC/21, upon which the following bodies were represented:

British Coal
British Pharmacopoeia Commission
British Sulphate of Ammonia Federation Ltd
Chemical Industries Association
Fertiliser Manufacturers' Association Ltd
Ministry of Defence
Textile Institute

This British Standard, having been prepared under the direction of the Chemicals Standards Committee, was published under the authority of the Board of BSI and comes into effect on 30 September 1987

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The following BSI references relate to the work on this standard:
Committee reference CIC/21
Draft (ref. 86/53129) announced in BSI News September 1986

ISBN 0 580 16115 3

### Amendments issued since publication

Amd. No.	Date of issue	Comments

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## **Foreword**

This Part of BS 4267 has been prepared under the direction of the Chemicals Standards Committee. It explains the revision of the 1968 edition into Parts. It is initially intended to publish 10 Parts of BS 4267, which will collectively supersede the 1968 edition. As each Part is published, the corresponding clause of BS 4267:1968 will be withdrawn by amendment. The relationship of these Parts to the 1968 edition of this standard and to International Standards is summarized in Table 1.

Following the active participation of the UK in Sub-committee 4, of Technical Committee 47, Chemistry, of the International Organization for Standardization (ISO) and in accordance with BSI policy, two international methods of test, approved by the UK, are now published as separate, dual-numbered Parts of BS 4267.

The main changes to the 1968 edition are as follows:

- a) the method for the determination of iron content has been excluded as it is no longer used;
- b) the method for the determination of total carbon content has been omitted; it is intended that it be replaced by a method which is the subject of current study;
- c) the colorimetric method for the determination of chloride content has now been supplemented with a potentiometric method;
- d) international methods have been implemented, if approved by the UK.

In addition to the methods of test for ammonium nitrate referred to in this Part of BS 4267, there are certain methods which have been developed by ISO Technical Committee 134, Fertilizers and soil conditioners, which are applicable to ammonium nitrate for general industrial use as well as that used specifically for fertilizers. Such methods, which are published or in preparation as Sections and Subsections of BS 5551, provide alternative methods for some determinations or the means of determining other properties. Attention is drawn to BS 5551-3.4, BS 5551-3.5 $^{\rm I}$ ) and BS 5551-4.1.1.

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.

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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.

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<sup>1)</sup> In preparation.

Table 1 — Summary of revision of BS 4267

Current revision of BS 4267	Titles	BS 4267:1968 edition	Corresponding International Standard
Part 0	General introduction	_	
Part 1 <sup>a</sup>	Method for determination of ammoniacal nitrogen content	Clause 2	≠ ISO 5314
Part 2 <sup>a</sup>	Method for determination of total nitrogen content	Clause 3	$\neq$ ISO 5315
Part 3	Method for measurement of pH value	Clause 4	$\equiv$ ISO 2365
Part 4	Method for determination of sulphated ash	Clause 5	
Part 5	Method for determination of matter insoluble in water	Clause 6	$\equiv$ ISO 2995
Part 6	Method for determination of water content	Clause 8	≠ ISO 5791
Part 7	Methods for determination of nitrite content	Clause 9	
Part 8	Methods for determination of chloride content	Clause 10	$\neq$ ISO 6227
Part 9	Method for determination of sulphate content	Clause 12	≠ ISO 3329

 $\begin{array}{rcl}
\text{NOTE} & \equiv \text{indicates "identical".} \\
& \neq \text{indicates "related".}
\end{array}$ 

1  $\ensuremath{\mathbb{C}}$ BSI 10-1999

<sup>&</sup>lt;sup>a</sup> In preparation.

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## Publications referred to

BS 4267:1968, Methods of test for ammonium nitrate.

BS 4267, Ammonium nitrate.

BS 4267-0, General introduction.

BS 4267-1, Method for determination of ammoniacal nitrogen content<sup>2</sup>).

BS 4267-2, Method for determination of total nitrogen content<sup>2)</sup>.

BS 4267-3, Method for measurement of pH value.

BS 4267-4, Method for determination of sulphated ash.

BS 4267-5, Method for determination of matter insoluble in water.

BS 4267-6, Method for determination of water content.

BS 4267-7, Methods for determination of nitrite content.

BS 4267-8, Methods for determination of chloride content.

BS 4267-9, Method for determination of sulphate content.

BS 5551, Fertilizers.

BS 5551-3.4, Method for determination of oil retention of high nitrogen content, straight ammonium nitrate fertilizers.

BS 5551-3.5,  $Test\ sieving^2$ ).

BS 5551-4.1.1, Nitron gravimetric method for determination of nitrate nitrogen.

ISO 2365, Ammonium nitrate for industrial use — measurement of pH value — Potentiometric method.

ISO 2995, Ammonium nitrate for industrial use — Determination of matter insoluble in water — Gravimetric method.

ISO 3329, Ammonium nitrate for industrial use — Determination of sulphur compounds — Method by reduction and titrimetry.

ISO 5314, Fertilizers — Determination of ammoniacal nitrogen content — Titrimetric method after distillation.

ISO 5315, Fertilizers — Determination of total nitrogen content — Titrimetric method after distillation.

ISO 5791, Ammonium nitrate for industrial use — Determination of water content — Karl Fischer method.

 ${\rm ISO~6227,~Chemical~products~for~industrial~use-General~method~for~determination~of~chloride~ions-Potentiometric~method.}$ 

<sup>&</sup>lt;sup>2)</sup> In preparation.

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