



BSI Standards Publication

**Inorganic fertilizers — Determination of
specific parameters in ammonium nitrate
fertilizers of high nitrogen content**

National foreword

This Published Document is the UK implementation of CEN/TS 17751:2022.

The UK participation in its preparation was entrusted to Technical Committee CII/37, Fertilisers and related chemicals.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

This publication is not to be regarded as a British Standard.

© The British Standards Institution 2022
Published by BSI Standards Limited 2022

ISBN 978 0 539 17586 8

ICS 65.080

Compliance with a Published Document cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 July 2022.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 17751

April 2022

ICS 65.080

English Version

**Inorganic fertilizers - Determination of specific parameters
in ammonium nitrate fertilizers of high nitrogen content**

Engrais inorganiques - Détermination des paramètres
spécifiques des engrais à base de nitrate d'ammonium
à forte teneur en azote

Anorganische Düngemittel - Bestimmung spezifischer
Parameter bei Ammoniumnitratdüngemitteln mit
hohem Stickstoffgehalt

This Technical Specification (CEN/TS) was approved by CEN on 13 March 2022 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents		Page
European foreword		3
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4	Sampling and sample preparation	6
4.1	Sampling	6
4.2	Sample preparation	6
5	Determination	6
5.1	Nitrogen content as a result of ammonium nitrate	6
5.2	pH of a solution of ammonium nitrate fertilizers of high nitrogen content	6
5.3	Particle size of ammonium nitrate fertilizers of high nitrogen content	6
5.4	Chloride content of ammonium nitrate fertilizers of high nitrogen content	6
5.5	Copper content of ammonium nitrate fertilizers of high nitrogen content	6
Bibliography		7

European foreword

This document (CEN/TS 17751:2022) has been prepared by Technical Committee CEN/TC 260 “Fertilizers and liming materials”, the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Regulation (EU) 2019/1009 [1] lays down the rules on the making available on the market of EU fertilizing products and the specific safety and quality requirements for the defined product function categories (PFCs). Straight or compound solid inorganic macronutrient ammonium nitrate fertilizers of high nitrogen content have been classified into PFC 1(C)(I)(a)(i-ii)(A).

The specific safety and quality requirements in relation to the following specific parameters in these EU fertilizing products are defined in this document as well as normative references of the test methods to be used in order to measure the compliance with the related requirement in the Regulation (EU) 2019/1009 [1].

WARNING — The use of this document can involve hazardous materials, operations and equipment. This document does not purport to address all the safety problems associated with its use. It is the responsibility of the user of this document to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This document specifies references to methods for the determination of the following specific parameters in ammonium nitrate fertilizers of high nitrogen content:

- the nitrogen content as a result of ammonium nitrate;
- pH of a solution of ammonium nitrate fertilizers of high nitrogen content;
- the particle size of ammonium nitrate fertilizers of high nitrogen content;
- the chloride content;
- the copper content.

This document is applicable to EU fertilizing products classified as PFC 1(C)(I)(a)(i-ii)(A) and PFC 7 as long as the blend only consists of EU fertilizing products classified as PFC 1(C), PFC 2 and PFC 5 and still fulfils the requirements for PFC 1(C)(I)(a)(i-ii)(A) as specified in the Regulation (EU) 2019/1009 [1].

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1482-1:2007, *Fertilizers and liming materials — Sampling and sample preparation — Part 1: Sampling*

EN 1482-2:2007, *Fertilizers and liming materials — Sampling and sample preparation — Part 2: Sample preparation*

EN 1482-3:2016, *Fertilizers and liming materials — Sampling and sample preparation — Part 3: Sampling of static heaps*

EN 12944-1:1999,¹ *Fertilizers and liming materials — Vocabulary — Part 1: General terms*

EN 12944-2:1999,² *Fertilizers and liming materials — Vocabulary — Part 2: Terms relating to fertilizers*

EN 15475:2009, *Fertilizers — Determination of ammoniacal nitrogen*

EN 15476:2009, *Fertilizers — Determination of nitric and ammoniacal nitrogen according to Devarda*

CEN/TS 17759:2022, *Inorganic fertilizers — Determination of pH of a solution of ammonium nitrate fertilizers of high nitrogen content*

CEN/TS 17760:2022, *Inorganic fertilizers — Determination of particle size of ammonium nitrate fertilizers of high nitrogen content*

CEN/TS 17761:2022, *Inorganic fertilizers — Determination of the chloride content in ammonium nitrate fertilizers of high nitrogen content*

¹ As impacted by EN 12944-1:1999/AC:2000.

² As impacted by EN 12944-2:1999/AC:2000.