



BSI Standards Publication

**Inorganic fertilizers — Determination
of particle size of ammonium nitrate
fertilizers of high nitrogen content**

National foreword

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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.

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English Version

Inorganic fertilizers - Determination of particle size of ammonium nitrate fertilizers of high nitrogen content

Engrais inorganiques - Détermination de la taille des particules des engrais à base de nitrate d'ammonium et à forte teneur en azote

Anorganische Düngemittel - Bestimmung der Partikelgröße in Ammoniumnitratdüngemitteln mit hohem Stickstoffgehalt

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European foreword

This document (CEN/TS 17760:2022) has been prepared by Technical Committee CEN/TC 260 “Fertilizers and liming materials”, the secretariat of which is held by DIN.

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1 Scope

This document specifies a method for the determination of particle size of ammonium nitrate fertilizers of high nitrogen content.

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

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

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12944-1 and EN 12944-2 apply. ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

4 Principle

The test portion is sieved on a nest of three sieves either by hand or by mechanical means. The mass retained on each sieve is recorded and the percentage of test portion passing the required sieves is calculated.

5 Apparatus and equipment

Usual laboratory equipment and, in particular, the following.

5.1 200-mm-diameter woven-wire test sieves, with apertures of 2,0 mm, 1,0 mm and 0,5 mm respectively of standard range. One lid and one receiver for these sieves.

5.2 Balance, capable of weighing to the nearest 0,1 g.

5.3 Mechanical sieve shaker, (if available) capable of imparting both vertical and horizontal motion to the test portion.

6 Sampling and sample preparation

Sampling is not part of the method specified in this document. A recommended sampling method is given in EN 1482-1.

Sample preparation shall be carried out in accordance with EN 1482-2.

7 Procedure

7.1 The sample is divided representatively into test portions of approximately 100 g.