

ICS 65.080

English Version

**Liming materials - Determination of the dust content of granular  
liming materials before and after simulated handling conditions**

Amendements minéraux basiques - Détermination de la  
teneur en fines des amendements minéraux basiques  
granulés avant et après simulation des conditions de  
manipulation

Calcium-/Magnesium-Bodenverbesserungsmittel -  
Bestimmung des Staubanteils von granulatförmigen  
Calcium-/Magnesium-Bodenverbesserungsmitteln vor und  
nach simulierten Behandlungsbedingungen

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## Foreword

This document (CEN/TS 16305:2012) 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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## Introduction

A standard method for the determination of the dust content of granulated liming materials is required to indicate the stability and quality of the product and to simulate the dust produced during handling and storage.

A rotating device is used to simulate the abrasion caused by handling.

## 1 Scope

This European Standard specifies a method for the determination of the amount of dust in granulated liming materials, both before and after simulated handling conditions.

This method applies to all granulated and screened liming materials.

## 2 Normative references

The following referenced documents are indispensable for the application 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 1235, *Solid fertilizers — Test sieving (ISO 8397:1988, modified)*

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

EN 12944-3:2001, *Fertilizers and liming materials — Vocabulary — Part 3: Terms relating to liming materials*

ISO 565, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12944-3:2001 apply.

NOTE For further definitions see EN 12944-1 and EN 12944-2.

## 4 Principle

Dry sieving of a granulated liming material using a mechanical sieve. Abrasion using a Mechanical Rotating Device (MRD). Dry sieving of the product from the MRD using a mechanical sieve. Determination of the content of dust (i. e. material below 1 mm) before and after abrasion.

## 5 Apparatus

**5.1 Mechanical Rotating Device (MRD)**, according to Figure 1, with the following specific characteristics:

- cylinder internal diameter 250 mm, external diameter 340 mm, internal thickness 120 mm, external thickness  $\approx 130$  mm;
- three internal paddles: 75 mm length set at 0 °, 20 mm length set at 240 ° (clockwise), 20 mm length set at 300 ° (clockwise);
- cylinder speed rotation, 19 min<sup>-1</sup>.