

VÄETISED JA LUBIMATERJALID. SÜSINIKDIOKSIIDI
MÄÄRAMINE. OSA 2: LUBIMATERJALIDE MEETOD

Fertilizers and liming materials - Determination of
carbon dioxide - Part 2: Method for liming materials

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14397-2:2004 sisaldab Euroopa standardi EN 14397-2:2004 ingliskeelset teksti.	This Estonian standard EVS-EN 14397-2:2004 consists of the English text of the European standard EN 14397-2:2004.
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English version

Fertilizers and liming materials - Determination of carbon dioxide - Part 2: Method for liming materials

Engrais et amendements minéraux basiques -
Détermination de la teneur en dioxyde de carbone - Partie
2: Méthode applicable aux amendements minéraux
basiques

Düngemittel und Calcium-/Magnesium-
Bodenverbesserungsmittel - Bestimmung von
Kohlenstoffdioxid - Teil 2: Verfahren für Calcium-
/Magnesium-Bodenverbesserungsmittel

This European Standard was approved by CEN on 1 April 2004.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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Foreword

This document (EN 14397-2:2004) has been prepared by Technical Committee CEN/TC 260 "Fertilizers and liming materials", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2005, and conflicting national standards shall be withdrawn at the latest by January 2005.

EN 14397 "Fertilizers and liming materials — Determination of carbon dioxide" consists of two parts:

- *Part 1: Method for solid fertilizers (prCEN/TS 14397-1)*
- *Part 2: Method for liming materials*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This document specifies a method for the determination of carbon dioxide in all 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 1482, *Sampling of solid fertilizers and liming materials*.

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

EN ISO 3696, *Water for analytical laboratory use — Specification and test methods (ISO 3696:1987)*.

3 Terms and definitions

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

4 Principle

The carbon dioxide contained in liming materials in the form of carbonates is liberated by reaction with hydrochloric acid and determined volumetrically.

5 Reagents

5.1 General

During the analysis, unless otherwise stated, use only reagents of recognized analytical grade and water conforming to grade 3 in accordance with EN ISO 3696.

5.2 Concentrated hydrochloric acid, ρ_{20} (HCl) = 1,18 g/ml to 1,19 g/ml

5.3 Diluted hydrochloric acid, ρ_{20} (HCl) = 1,09 g/ml

Dilute one part by volume of concentrated hydrochloric acid (5.2) with one part by volume of water.

5.4 Concentrated sulfuric acid, ρ_{20} (H₂SO₄) = 1,84 g/ml

5.5 Sodium sulfate, Na₂SO₄

5.6 Sealing liquid

Add 20 g of sodium sulfate (5.5) and 5 ml of concentrated sulfuric acid (5.4) to water and make up to 100 ml. Colour with a few drops of methyl red solution (5.8). The sealing liquid shall be saturated with carbon dioxide.