

**Mullaparandajad ja kasvukeskkond. pH määramine.**

**Soil improvers and growing media - Determination of pH**

## EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN 13037:2011 sisaldab Euroopa standardi EN 13037:2011 ingliskeelset teksti.	This Estonian standard EVS-EN 13037:2011 consists of the English text of the European standard EN 13037:2011.
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## English Version

## Soil improvers and growing media - Determination of pH

Amendements du sol et supports de culture -  
Détermination du pH

Bodenverbesserungsmittel und Kultursubstrate -  
Bestimmung des pH-Wertes

This European Standard was approved by CEN on 17 September 2011.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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## Contents

Page

Foreword.....	3
1 Scope .....	4
2 Normative references .....	4
3 Terms and definitions .....	4
4 Principle.....	4
5 Reagents.....	4
6 Apparatus .....	5
7 Preparation .....	5
7.1 Extraction .....	5
7.1.1 General.....	5
7.1.2 Test samples passing through a 20 mm sieve .....	5
7.1.3 Test samples passing through a 40 mm sieve .....	6
8 Procedure .....	6
8.1 Calibration of the pH meter.....	6
8.2 Measurement of the pH.....	6
9 Precision .....	6
10 Test report .....	6
Annex A (informative) Results of an interlaboratory trial to determine pH.....	7
Bibliography.....	8

## Foreword

This document (EN 13037:2011) has been prepared by Technical Committee CEN/TC 223 “Soil improvers and growing media”, the secretariat of which is held by ASI.

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of an identical text or by endorsement, at the latest by May 2012, and conflicting national standards shall be withdrawn at the latest by May 2012.

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

This document supersedes EN 13037:1999.

The main change to the previous edition is the change of the scope.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies an instrumental method for the routine determination of pH in a suspension of soil improvers or growing media.

This method is not applicable to liming materials and preformed materials such as mineral wool slabs and foam slabs.

NOTE The requirements of the standard may differ from the national legal requirements for the declaration of the products concerned.

## 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 13040:2007, *Soil improvers and growing media – Sample preparation for chemical and physical tests, determination of dry matter content, moisture content and laboratory compacted bulk density*

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

ISO 1770, *Solid-stem general purpose thermometers*

## 3 Terms and definitions

For the purposes of this document the terms and definitions given in EN 13040:2007 apply.

## 4 Principle

A sample is extracted with water at  $(22 \pm 3,0) ^\circ\text{C}$  in an extraction ratio of 1 : 5 (1 *V* sample + 5 *V* water). The pH of the suspension is measured using a pH meter.

## 5 Reagents

Use only reagents of recognized analytical grade.

**5.1 Water** with a specific conductivity not higher than 0,2 mS/m at 25 °C and a pH > 5,6 (grade 2 water according to EN ISO 3696).

**5.2 Buffer solution**, pH = 4,00 at 20 °C

Dissolve 10,21 g of potassium hydrogen phthalate ( $\text{C}_8\text{H}_5\text{KO}_4$ ) in water (see 5.1) and dilute to 1000 ml in a volumetric flask.

**5.3 Buffer solution**, pH = 7,00 at 20 °C

Dissolve 3,800 g of potassium dihydrogen phosphate ( $\text{KH}_2\text{PO}_4$ ) and 3,415 g disodium hydrogen phosphate ( $\text{Na}_2\text{HPO}_4$ ) in water (see 5.1) and dilute to 1000 ml in a volumetric flask.

The potassium dihydrogen phosphate shall be dried before use for 2 h at 110 °C to 120 °C.