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Standards

Irish Standard  
I.S. EN 16502:2014

# Test method for the determination of the degree of soil acidity according to Baumann-Gully

## I.S. EN 16502:2014

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EUROPEAN STANDARD

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English Version

## Test method for the determination of the degree of soil acidity according to Baumann-Gully

Méthode d'essai pour la détermination du degré d'acidité  
des sols selon Baumann-Gully

Prüfverfahren zur Bestimmung des Säuregrades eines  
Bodens nach Baumann-Gully

This European Standard was approved by CEN on 18 July 2014.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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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## **Foreword**

This document (EN 16502:2014) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", 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of an identical text or by endorsement, at the latest by February 2015 and conflicting national standards shall be withdrawn at the latest by February 2015.

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 European Standard is based on DIN 4030-2, *Assessment of water, soil and gases for their aggressiveness to concrete — Part 2: Sampling and analysis of water and soil samples*.

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## EN 16502:2014 (E)

### 1 Scope

This European Standard specifies the procedure for the determination of the degree of acidity of a soil to be used for evaluating its class of aggressiveness to EN 206. The degree of acidity according to Baumann-Gully is the result of the determination of exchangeable hydrogen ion concentration that humic particles of a soil release.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 206, *Concrete — Specification, performance, production and conformity*

EN ISO 385, *Laboratory glassware — Burettes (ISO 385)*

EN ISO 1042, *Laboratory glassware — One-mark volumetric flasks (ISO 1042)*

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

ISO 11074, *Soil quality — Vocabulary*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 11074 and the following apply.

#### 3.1

##### **soil acidity**

$SA_{BG}$

indicates the hydrolytic acidic level of a soil, expressed as the volume of solution of sodium hydroxide, in millilitres (ml) used per kilogram (kg) of dried soil

#### 3.2

##### **undisturbed sample**

bulk sample obtained from the soil using a method designed to preserve the soil structure

#### 3.3

##### **disturbed sample**

bulk sample, obtained from the soil without any attempt to preserve the soil structure

#### 3.4

##### **laboratory sample**

reduced sample derived from a bulk sample for laboratory inspection or testing

#### 3.5

##### **subsample**

sample obtained from the laboratory sample by means of a sample reduction procedure

#### 3.6

##### **test sample**

portion of material, resulting from the laboratory sample by means of an appropriate method of sample pre-treatment, and having the size necessary for the desired testing or analysis

#### 3.7

##### **check sample**

subsample kept for future analysis

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