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# Jord, bioaffald og slam – Bestemmelse af pH

Soil, treated biowaste and sludge –  
Determination of pH (ISO 10390:2021)

**DANSK STANDARD**  
Danish Standards Association

Göteborg Plads 1  
DK-2150 Nordhavn  
Tel: +45 39 96 61 01  
[dansk.standard@ds.dk](mailto:dansk.standard@ds.dk)  
[www.ds.dk](http://www.ds.dk)

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EUROPÄISCHE NORM

March 2022

ICS 13.080.10

Supersedes EN 15933:2012

English Version

## Soil, treated biowaste and sludge - Determination of pH (ISO 10390:2021)

Sols, biodéchets traités et boues -  
Détermination du pH (ISO 10390:2021)

Boden, behandelter Bioabfall und Schlamm -  
Bestimmung des pH-Werts (ISO 10390:2021)

This European Standard was approved by CEN on 12 March 2021.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## **European foreword**

This document ([EN ISO 10390:2022](#)) has been prepared by Technical Committee ISO/TC 190 "Soil quality" in collaboration with Technical Committee CEN/TC 444 "Environmental characterization of solid matrices" the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by September 2022, and conflicting national standards shall be withdrawn at the latest by September 2022.

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

This document supersedes [EN 15933:2012](#).

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### **Endorsement notice**

The text of [ISO 10390:2021](#) has been approved by CEN as [EN ISO 10390:2022](#) without any modification.

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Third edition  
2021-04-06

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## **Jord, bioaffald og slam – Bestemmelse af pH**

*Sols, biodéchets traités et boues — Détermination du pH*



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ISO copyright office  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 3, *Chemical and physical characterization*.

This third edition cancels and replaces the second edition ([ISO 10390:2005](http://www.iso.org/iso/10390:2005)), which has been technically revised. The main changes compared to the previous edition are as follows:

- The content of [ISO 10390:2005](http://www.iso.org/iso/10390:2005) and [EN 15933:2012](http://www.iso.org/iso/15933:2012) were merged;
- The scope was widened to include sludge and treated biowaste;
- Additional validation data for soil, sludge and treated biowaste were included;
- The text was editorially revised.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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# Jord, bioaffald og slam – Bestemmelse af pH

## 1 Scope

This document specifies an instrumental method for the routine determination of pH within the range pH 2 to pH 12 using a glass electrode in a 1:5 (volume fraction) suspension of soil, sludge and treated biowaste in either water (pH in H<sub>2</sub>O), in 1 mol/l potassium chloride solution (pH in KCl) or in 0,01 mol/l calcium chloride solution (pH in CaCl<sub>2</sub>).

This document is applicable to all types of air-dried soil and treated biowaste samples.

NOTE — For example, pretreated in accordance with [ISO 11464](#) or [EN 16179](#) or [EN 15002](#).

## 2 Normative references

There are no normative references in this document.