

Soil quality - Guidance on laboratory testing for biodegradation of organic chemicals in soil under anaerobic conditions (ISO 15473:2002)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 15473:2020 sisaldab Euroopa standardi EN ISO 15473:2020 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 15473:2020 consists of the English text of the European standard EN ISO 15473:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.04.2020.	Date of Availability of the European standard is 29.04.2020.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 13.080.30

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English Version

Soil quality - Guidance on laboratory testing for  
biodegradation of organic chemicals in soil under  
anaerobic conditions (ISO 15473:2002)

Qualité du sol - Lignes directrices relatives aux essais  
en laboratoire pour la biodégradation de produits  
chimiques organiques dans le sol sous conditions  
anaérobies (ISO 15473:2002)

Bodenbeschaffenheit - Anleitung für  
Laboratoriumsuntersuchungen zur biologischen  
Abbaubarkeit von organischen Chemikalien im Boden  
unter anaeroben Bedingungen (ISO 15473:2002)

This European Standard was approved by CEN on 13 April 2020.

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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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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

The text of ISO 15473:2002 has been prepared by Technical Committee ISO/TC 190 "Soil quality" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15473:2020 by 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 October 2020, and conflicting national standards shall be withdrawn at the latest by October 2020.

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.

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## Endorsement notice

The text of ISO 15473:2002 has been approved by CEN as EN ISO 15473:2020 without any modification.

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 15473 was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 4, *Biological methods*.

## Introduction

Organic chemicals can be introduced into the soil both intentionally and accidentally, after which they can degrade as a result of biological action. For chemicals which do degrade, the rate of degradation can vary considerably, depending not only on the molecular structure of the chemical, but also on soil conditions such as temperature, water and oxygen availability which influence microbial activity. The activity of microorganisms often plays a major role in degradative processes.

ISO 11266 [3] gives general guidelines for the selection and method of tests to determine the biodegradation of organic chemicals in soils under aerobic conditions.

It is necessary to have laboratory tests available to estimate the rate and extent of biodegradation under anaerobic conditions, and to assess the capability of soil to degrade organic chemicals under these conditions.

This International Standard gives guidance for the method of tests to determine the biodegradation of organic chemicals in soils under anaerobic conditions.