



# SLOVENSKI STANDARD

## SIST EN ISO 7827:2013

01-januar-2013

Nadomešča:

SIST EN ISO 7827:1997

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**Kakovost vode - Vrednotenje "lahke", "končne" aerobne biološke razgradljivosti organskih snovi v vodnem okolju - Metoda določevanja raztopljenega organskega ogljika (DOC) (ISO 7827:2010)**

Water quality - Evaluation of the "ready", "ultimate" aerobic biodegradability of organic compounds in an aqueous medium - Method by analysis of dissolved organic carbon (DOC) (ISO 7827:2010)

Wasserbeschaffenheit - Bestimmung der "leichten", "vollständigen" aeroben biologischen Abbaubarkeit organischer Stoffe in einem wässrigen Medium - Verfahren mittels Analyse des gelösten organischen Kohlenstoffs (DOC) (ISO 7827:2010)

Qualité de l'eau - Évaluation de la biodégradabilité aérobie «facile», «ultime» des composés organiques en milieu aqueux - Méthode par analyse du carbone organique dissous (COD) (ISO 7827:2010)

**Ta slovenski standard je istoveten z: EN ISO 7827:2012**

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**ICS:**

13.060.70	Preiskava bioloških lastnosti vode	Examination of biological properties of water
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**SIST EN ISO 7827:2013**

**en,fr,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 7827**

December 2012

ICS 13.060.70

Supersedes EN ISO 7827:1995

English Version

**Water quality - Evaluation of the "ready", "ultimate" aerobic biodegradability of organic compounds in an aqueous medium - Method by analysis of dissolved organic carbon (DOC) (ISO 7827:2010)**

Qualité de l'eau - Évaluation de la biodégradabilité aérobie "facile", "ultime" des composés organiques en milieu aqueux - Méthode par analyse du carbone organique dissous (COD) (ISO 7827:2010)

Wasserbeschaffenheit - Bestimmung der leichten, vollständigen aeroben biologischen Abbaubarkeit organischer Stoffe in einem wässrigen Medium - Verfahren mittels Analyse des gelösten organischen Kohlenstoffs (DOC) (ISO 7827:2010)

This European Standard was approved by CEN on 8 December 2012.

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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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

The text of ISO 7827:2010 has been prepared by Technical Committee ISO/TC 147 "Water quality" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 7827:2012 by Technical Committee CEN/TC 230 "Water analysis" 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 June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

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 ISO 7827:1995.

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

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**Endorsement notice**

The text of ISO 7827:2010 has been approved by CEN as a EN ISO 7827:2012 without any modification.

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# INTERNATIONAL STANDARD

**ISO  
7827**

Third edition  
2010-11-15

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## Water quality — Evaluation of the “ready”, “ultimate” aerobic biodegradability of organic compounds in an aqueous medium — Method by analysis of dissolved organic carbon (DOC)

iTeh STANDARD PREVIEW

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*Qualité de l'eau — Évaluation de la biodégradabilité aérobie «facile»,  
«ultimé» des composés organiques en milieu aqueux — Méthode par  
analyse du carbone organique dissous (COD)*

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## ISO 7827:2010(E)

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**ISO 7827:2010(E)****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 2.

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.

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.

ISO 7827 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 5, *Biological methods*.

This third edition cancels and replaces the second edition (ISO 7827:1994), which has been technically revised.

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# Water quality — Evaluation of the “ready”, “ultimate” aerobic biodegradability of organic compounds in an aqueous medium — Method by analysis of dissolved organic carbon (DOC)

**WARNING** — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

**IMPORTANT** — It is absolutely essential that tests conducted according to this International Standard be carried out by suitably trained staff.

**SAFETY PRECAUTIONS** — Activated sludge and sewage contain potentially pathogenic organisms. Therefore take appropriate precautions when handling them. Handle toxic test compounds and those whose properties are unknown with care.

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### 1 Scope

This International Standard specifies a method for the evaluation of the “ready” and “ultimate” biodegradability of organic compounds at a given range of concentrations by aerobic microorganisms. In this context, this International Standard also gives specific definitions for the terms “ready” and “ultimate”.

The method applies to organic compounds which are:

- soluble at the concentration used under the conditions of the test [dissolved organic carbon (DOC) concentrations of 10 mg/l to 40 mg/l];
- non-volatile or having a negligible vapour pressure under the conditions of the test;
- not significantly adsorbable on glass and activated sludge;
- not inhibitory to the test microorganisms at the concentration chosen for the test.

The method is not suitable for waste waters, as they usually contain significant amounts of water-insoluble organic carbon, which is not included in DOC measurements.

### 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.

ISO 8245, *Water quality — Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)*

ISO 9408, *Water quality — Evaluation of ultimate aerobic biodegradability of organic compounds in aqueous medium by determination of oxygen demand in a closed respirometer*