

SLOVENSKI STANDARD

SIST EN ISO 14851:2019

01-junij-2019

Nadomešča:

SIST EN ISO 14851:2004

Določanje končne aerobne biorazgradljivosti polimernih materialov v vodnem mediju - Metoda z merjenjem porabe kisika v zaprtem respirometru (ISO 14851:2019)

Determination of the ultimate aerobic biodegradability of plastic materials in an aqueous medium - Method by measuring the oxygen demand in a closed respirometer (ISO 14851:2019)

iTeh STANDARD PREVIEW

Bestimmung der vollständigen aeroben Bioabbaubarkeit von Kunststoff-Materialien in einem wässrigen Medium - Verfahren mittels Messung des Sauerstoffbedarfs in einem geschlossenen Respirometer (ISO 14851:2019)

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Évaluation de la biodégradabilité aérobie ultime des matériaux plastiques en milieu aqueux - Méthode par détermination de la demande en oxygène dans un respiromètre fermé (ISO 14851:2019)

Ta slovenski standard je istoveten z: EN ISO 14851:2019

ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general
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EUROPEAN STANDARD
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English Version

**Determination of the ultimate aerobic biodegradability of
plastic materials in an aqueous medium - Method by
measuring the oxygen demand in a closed respirometer
(ISO 14851:2019)**

Évaluation de la biodégradabilité aérobie ultime des
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Bestimmung der vollständigen aeroben
Bioabbaubarkeit von Kunststoff-Materialien in einem
wässrigen Medium - Verfahren mittels Messung des
Sauerstoffbedarfs in einem geschlossenen
Respirometer (ISO 14851:2019)

This European Standard was approved by CEN on 12 March 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents	Page
European foreword.....	3

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European foreword

This document (EN ISO 14851:2019) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by October 2019, and conflicting national standards shall be withdrawn at the latest by October 2019.

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INTERNATIONAL STANDARD

ISO
14851

Second edition
2019-03

Determination of the ultimate aerobic biodegradability of plastic materials in an aqueous medium — Method by measuring the oxygen demand in a closed respirometer

*Évaluation de la biodégradabilité aérobie ultime des matériaux
plastiques en milieu aqueux — Méthode par détermination de la
demande en oxygène dans un respiromètre fermé*

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Contents

Page

Foreword	iv
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	3
5 Test environment	3
6 Reagents	3
6.1 Distilled or deionized water	4
6.2 Test medium	4
6.2.1 Standard test medium	4
6.2.2 Optimized test medium	4
6.3 Pyrophosphate solution	6
6.4 Carbon dioxide absorber	6
7 Apparatus	6
8 Procedure	6
8.1 Test material	6
8.2 Reference material	7
8.3 Preparation of the inoculum	7
8.4 Test	8
9 Calculation and expression of results	9
9.1 Calculation	9
9.2 Expression and interpretation of results	10
10 Validity of results	10
11 Test report	11
Annex A (informative) Theoretical oxygen demand (ThOD)	12
Annex B (informative) Correction of BOD values for interference by nitrification	13
Annex C (informative) Principle of a closed manometric respirometer	15
Annex D (informative) Two-phase closed-bottle version of the respirometric test	17
Annex E (informative) Example of the determination of a carbon balance	20
Annex F (informative) Example of a determination of the amount of water-insoluble polymer remaining at the end of a biodegradation test and the molecular mass of the polymer	22
Annex G (informative) Example of the determination of the CO₂ absorbed in the absorbent	23
Bibliography	25

ISO 14851:2019(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.

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).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 14, *Environmental aspects*.

This second edition cancels and replaces the first edition (ISO 14851:1999), which has been technically revised. It also incorporates the Technical Corrigendum ISO 14851:1999/Cor.1:2005. The main changes compared to the previous edition are as follows:

- the footnotes have been renumbered;
- in [Annex C](#), errors in the key to [Figure C.1](#) have been corrected and minor improvements made to the figure itself;
- in scope and [Clause 8](#), soil and compost have been excluded for the inoculums used in this document;

- in 8.4, numbers of test flask for the test material and blank control have been changed from two to three;
- references in this document have been updated for latest active version;
- the Bibliography has been updated.

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.

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ISO 14851:2019(E)

Introduction

With the increasing use of plastics, their recovery and disposal have become a major issue. As a first priority, recovery is promoted. Complete recovery of plastics, however, is difficult. For example, plastic litter, which comes mainly from consumers, is difficult to recover completely. Additional examples of plastics which are difficult to recover are fishing tackle, plastic microbeads in personal care products and water-soluble polymers. These plastic materials tend to leak from closed waste-management cycles into the environment. Biodegradable plastics are now emerging as one of the options available to solve such environmental problems. Plastic materials, such as products or packaging, which are sent to composting facilities are expected to be potentially biodegradable. Therefore, it is very important to determine the potential biodegradability of such materials and to obtain an indication of their biodegradability in natural environments.

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