



SLOVENSKI STANDARD SIST EN ISO 20200:2016

01-februar-2016

Nadomešča:
SIST EN ISO 20200:2005

Polimerni materiali - Ugotavljanje razpada polimernih materialov pri simuliranem kompostiranju v laboratorijskem merilu (ISO 20200:2015)

Plastics - Determination of the degree of disintegration of plastic materials under simulated composting conditions in a laboratory-scale test (ISO 20200:2015)

Kunststoffe - Bestimmung des Zersetzungsgrades von Kunststoffmaterialien unter nachgebildeten Kompostierungsbedingungen mittels einer Prüfung im Labormaßstab (ISO 20200:2015)

Plastiques - Détermination du degré de désintégration de matériaux plastiques dans des conditions de compostage simulées lors d'un essai de laboratoire (ISO 20200:2015)

Ta slovenski standard je istoveten z: **EN ISO 20200:2015**

ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general
-----------	--------------------------------	---------------------

SIST EN ISO 20200:2016	en,de
-------------------------------	--------------

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 20200:2016

<https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-e0ece8c177ff/sist-en-iso-20200-2016>

EUROPEAN STANDARD

EN ISO 20200

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2015

ICS 83.080.01

Supersedes EN ISO 20200:2005

English Version

Plastics - Determination of the degree of disintegration of plastic materials under simulated composting conditions in a laboratory-scale test (ISO 20200:2015)

Plastiques - Détermination du degré de désintégration de matériaux plastiques dans des conditions de compostage simulées lors d'un essai de laboratoire (ISO 20200:2015)

Kunststoffe - Bestimmung des Zeretzungsgrades von Kunststoffmaterialien unter nachgebildeten Kompostierungsbedingungen mittels einer Prüfung im Labormaßstab (ISO 20200:2015)

This European Standard was approved by CEN on 17 October 2015.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

Contents

Page

European foreword..... 3

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

SIST EN ISO 20200:2016

<https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-e0ece8c177ff/sist-en-iso-20200-2016>

European foreword

This document (EN ISO 20200:2015) 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 June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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 20200:2005.

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, 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.

Full STANDARD PREVIEW
(standards.iteh.ai)
Endorsement notice

The text of ISO 20200:2015 has been approved by CEN as EN ISO 20200:2015 without any modification.

<https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-e0ece8c177ff/sist-en-iso-20200-2016>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 20200:2016

<https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-e0ece8c177ff/sist-en-iso-20200-2016>

INTERNATIONAL
STANDARD

ISO
20200

Second edition
2015-11-15

**Plastics — Determination of the
degree of disintegration of plastic
materials under simulated composting
conditions in a laboratory-scale test**

*Plastiques — Détermination du degré de désintégration de matériaux
plastiques dans des conditions de compostage simulées lors d'un essai
de laboratoire*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 20200:2016](https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-e0ece8c177ff/sist-en-iso-20200-2016)

[https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-
e0ece8c177ff/sist-en-iso-20200-2016](https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-e0ece8c177ff/sist-en-iso-20200-2016)



Reference number
ISO 20200:2015(E)

© ISO 2015

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 20200:2016

<https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-e0ece8c177ff/sist-en-iso-20200-2016>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

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
copyright@iso.org
www.iso.org

Contents

Page

Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Principle.....	2
5 Synthetic solid waste.....	2
6 Composting reactor.....	3
7 Procedure.....	3
7.1 Test material preparation.....	3
7.2 Start-up of the test.....	4
7.3 Thermophilic incubation period (high temperature).....	4
7.4 Mesophilic incubation period (at room temperature).....	4
8 Monitoring the composting process.....	5
9 Diagnostic parameters.....	5
9.1 Odour.....	5
9.2 Visual appearance.....	5
9.3 Chemical analysis.....	5
9.4 Determination of dry mass and volatile solids.....	5
10 Termination of the test and measurement of the degree of disintegration.....	6
11 Calculation of degree of disintegration.....	6
12 Expression of results.....	6
13 Validity of the test.....	6
14 Test report.....	7

ISO 20200:2015(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).

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).

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

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 5, *Physical-chemical properties*.

This second edition cancels and replaces the first edition (ISO 20200:2004), which has been technically revised with the following changes:

- a) the term "heavy metal" has been replaced by "regulated metal" ([3.2](#));
- b) the term "commercial" has been replaced by "municipal or industrial" ([Clause 4](#) and [5](#));
- c) the numerical value of R 42,8 % has been replaced by 42,3 % ([Clause 13](#));
- d) the variability of the results has been raised from 10 % to 20 % ([Clause 13](#)).

Introduction

The test method described in this International Standard determines the degree of disintegration of plastic materials when exposed to a composting environment. The method is simple and inexpensive, does not require special bioreactors, and is scaled for use in any general-purpose laboratory. It requires the use of a standard and homogeneous synthetic solid waste. The synthetic waste components are dry, clean, safe products which can be stored in the laboratory without any odour or health problems. The synthetic waste is of constant composition and devoid of any undesired plastic material which could be erroneously identified as test material at the end of testing, altering the final evaluation. The bioreactors are small, as is the amount of synthetic waste to be composted (approximately 3 l). With the limited amount of test material, this method provides a simplified test procedure. This test method is not aimed at determining the biodegradability of plastic materials under composting conditions. Further testing will be necessary before being able to claim compostability.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 20200:2016](https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-e0ece8c177ff/sist-en-iso-20200-2016)

<https://standards.iteh.ai/catalog/standards/sist/5fe054ff-bd36-4d25-bb83-e0ece8c177ff/sist-en-iso-20200-2016>