ICS 83.080.01 SLOVENSKÁ TECHNICKÁ NORMA December 2023

| STN | **Plasty**<br>**Stanovenie stupňa rozpadu materiálov z plastov v laboratórnych podmienkach kompostovania (ISO 20200: 2023)** | **STN**<br>**EN ISO 20200**<br><br>64 8005 |
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Plastics - Determination of the degree of disintegration of plastic materials under composting conditions in a laboratory-scale test (ISO 20200:2023)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/23

Obsahuje: EN ISO 20200:2023, ISO 20200:2023

Oznámením tejto normy sa ruší
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN ISO 20200

August 2023

ICS 83.080.01

Supersedes EN ISO 20200:2015

English Version

# Plastics - Determination of the degree of disintegration of plastic materials under composting conditions in a laboratory-scale test (ISO 20200:2023)

Plastiques - Détermination du degré de désintégration de matériaux plastiques dans des conditions de compostage lors d'un essai de laboratoire (ISO 20200:2023)

Kunststoffe - Bestimmung des Zersetzungsgrades von Kunststoffmaterialien unter nachgebildeten Kompostierungsbedingungen mittels einer Prüfung im Labormaßstab (ISO 20200:2023)

This European Standard was approved by CEN on 18 April 2023.



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

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



Ref. No. EN ISO 20200:2023 E

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# European foreword

This document (EN ISO 20200:2023) 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 SIS.

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of an identical text or by endorsement, at the latest by February 2024, and conflicting national standards shall be withdrawn at the latest by February 2024.

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 20200 has been approved by CEN as EN ISO 20200:2023 without any modification.

INTERNATIONAL STANDARD

**ISO 20200**

Third edition
2023-08

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

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

Reference number
ISO 20200:2023(E)

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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 document 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 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.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 14, *Environmental aspects,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 20200:2015), which has been technically revised.

The main changes are as follows:

— the Clause 3 “Terms and definitions” has been updated;

— a new incubation mode (type 2) has been added, based on two stages (see Clause 4 and 7.3);

— the dimensions of the samples has been modified (see 7.1).

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.

# Introduction

The test method described in this document determines the degree of disintegration of plastic materials when exposed to a composting environment. The method 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.

**INTERNATIONAL STANDARD** **ISO 20200:2023(E)**

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

## 1 Scope

This document specifies a method of determining the degree of disintegration of plastic materials when exposed to a laboratory-scale composting environment. The method is not applicable to the determination of the biodegradability of plastic materials under composting conditions. Further testing is necessary to be able to claim compostability.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*