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Second edition  
2015-11-15

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## **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*



Reference number  
ISO 20200:2015(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 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](http://www.iso.org/directives)).

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- a) the term "heavy metal" has been replaced by "regulated metal" ([3.2](#));
- b) the term "commercial" has been replaced by "municipal or industrial" ([Clause 4](#) and [5](#));
- c) the numerical value of R 42,8 % has been replaced by 42,3 % ([Clause 13](#));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

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## 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.