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Plastics — Organic recycling — Specifications for compostable plastics

Plastiques — Recyclage organique — Spécifications pour les plastiques compostables



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Foreword

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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 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*.

This third edition cancels and replaces the second edition (ISO 17088:2012), which has been technically revised.

The main changes compared to the previous edition are as follows:

- in Clause 3:
 - the following terms have been added: organic recycling, anaerobic digestion, per- and polyfluorinated compound, well-managed industrial composting process, industrial composting, organic constituents, home composting;
 - the term catalyst has been deleted;
- 6.1.4 has been deleted;
- a new subclause, <u>6.2.2</u>, on variation in permitted thickness has been added;
- in 6.3, requirements regarding biodegradability of constituents have been revised;
- in <u>6.3.1.1</u>, the following references have been added as additional laboratory test methods for biodegradation testing: ISO 14851, ISO 14852, ISO 17556;
- a new subclause, <u>6.3.2</u>, on potential for biogas production has been added;
- 6.4 has been extended covering ecotoxicity tests with representative species from three trophic levels;
- in <u>6.5</u>, new requirements regarding control of constituents with respect to per- and poly-fluorinated compounds (PFCs) and hazardous substances (as specified in <u>Annex B</u>) have been included;
- the list of regulated metals in EU + EFTA countries has been revised;

— new annexes, <u>Annex B</u>, <u>Annex C</u>, <u>Annex E</u> and <u>Annex F</u>, have been added.

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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Introduction

Management of solid wastes is a problem of growing interest around the world. Cities, towns and countries are attempting to divert more materials from disposal (landfills and incineration without energy recovery) by performing different recovery options in order to transform waste into usable products. Plastics recovery technologies include material recovery (mechanical recycling, chemical or feedstock recycling, and biological or organic recycling) and the recovery of energy in the form of usable heat under controlled combustion conditions.

This document intends to correctly identify compostable plastics, and compostable products made from plastics, which can be recovered by organic recycling, i.e. will disintegrate and biodegrade satisfactorily together with biowaste producing compost as an outcome, in composting or in anaerobic digestion followed by composting, and will not leave any persistent or hazardous residues.