



# SLOVENSKI STANDARD SIST EN ISO 10210:2018

01-februar-2018

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**Polimerni materiali - Metode za pripravo vzorcev za preskušanje biorazgradljivosti polimernih materialov (ISO 10210:2012)**

Plastics - Methods for the preparation of samples for biodegradation testing of plastic materials (ISO 10210:2012)

Kunststoffe - Probenvorbereitung für die Bestimmung der Bioabbaubarkeit von Kunststoff-Materialien (ISO 10210:2012)

Plastiques - Méthodes de préparation des échantillons pour les essais de biodégradation des matériaux plastiques (ISO 10210:2012)

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**Ta slovenski standard je istoveten z: EN ISO 10210:2017**

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**ICS:**

83.080.01	Polimerni materiali na splošno	Plastics in general
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**SIST EN ISO 10210:2018**

**en,fr,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 10210**

December 2017

ICS 83.080.01

English Version

**Plastics - Methods for the preparation of samples for  
biodegradation testing of plastic materials (ISO  
10210:2012)**

Plastiques - Méthodes de préparation des échantillons  
pour les essais de biodégradation des matériaux  
plastiques (ISO 10210:2012)

Kunststoffe - Probenvorbereitung für die Bestimmung  
der Bioabbaubarkeit von Kunststoff-Materialien (ISO  
10210:2012)

This European Standard was approved by CEN on 17 October 2017.

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.

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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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

The text of ISO 10210:2012 has been prepared by Technical Committee ISO/TC 61 “Plastics” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 10210:2017 by 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 2018, and conflicting national standards shall be withdrawn at the latest by June 2018.

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.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 10210:2012 has been approved by CEN as EN ISO 10210:2017 without any modification.

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# INTERNATIONAL STANDARD

**ISO  
10210**

First edition  
2012-08-15

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## Plastics — Methods for the preparation of samples for biodegradation testing of plastic materials

*Plastiques — Méthodes de préparation des échantillons pour les essais  
de biodégradation des matériaux plastiques*

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## ISO 10210:2012(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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 10210 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 5, *Physical-chemical properties*.

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## Introduction

Plastics recovery technology includes material recycling, organic recycling and energy recovery. The use of biodegradable plastics is one of the valuable recovery options in the field of organic recycling.

ISO standards for determining the ultimate aerobic and anaerobic biodegradability of plastic materials in an aqueous medium, activated sludge, compost, digesting sludge and soil have been published. These standards include ISO 14851, ISO 14852, ISO 14853, ISO 14855-1, ISO 14855-2, ISO 15985 and ISO 17556. For the user of these standards, it might be difficult to compare biodegradation changes during a test, even when using the same samples, due to differences in the test conditions. These differences might arise from the compost preparation, the test preparation methodology, the shape and/or size of the test sample, etc. Accurate comparison of biodegradability data for the same plastic material can be difficult to achieve unless the conditions specified in the standards are accurately followed.

A unified approach to test sample preparation is important in achieving consistency within the standards mentioned above. The methods described in this document help to provide a consistent approach to sample preparation techniques for biodegradation testing of plastic materials.

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