ICS 83.080.01 SLOVENSKÁ TECHNICKÁ NORMA Október 2018

STN	**Plasty** **Diferenčná snímacia kalorimetria (DSC)** **Časť 6: Stanovenie oxidačno-indukčného času (izotermický OIT) a oxidačno-indukčnej teploty (dynamická OIT) (ISO 11357-6: 2018)**	**STN** **EN ISO 11357-6** 64 0748

Plastics - Differential scanning calorimetry (DSC) - Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT) (ISO 11357-6:2018)

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. 09/18

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Oznámením tejto normy sa ruší
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EUROPÄISCHE NORM

EN ISO 11357-6

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Supersedes EN ISO 11357-6:2013

English Version

Plastics - Differential scanning calorimetry (DSC) - Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT) (ISO 11357-6:2018)

Plastiques - Analyse calorimétrique différentielle (DSC) - Partie 6: Détermination du temps d'induction à l'oxydation (OIT isotherme) et de la température d'induction à l'oxydation (OIT dynamique) (ISO 11357-6:2018)

Kunststoffe - Dynamische Differenz-Thermoanalyse (DSC) - Teil 6: Bestimmung der Oxidations-Induktionszeit (isothermische OIT) und Oxidations-Induktionstemperatur (dynamische OIT) (ISO 11357-6:2018)

This European Standard was approved by CEN on 24 February 2018.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EN ISO 11357-6:2018 (E)

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European foreword

This document (EN ISO 11357-6:2018) 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of an identical text or by endorsement, at the latest by October 2018, and conflicting national standards shall be withdrawn at the latest by October 2018.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.

This document supersedes EN ISO 11357-6:2013.

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 11357-6:2018 has been approved by CEN as EN ISO 11357-6:2018 without any modification.

INTERNATIONAL STANDARD

ISO 11357-6

Third edition
2018-03

Plastics — Differential scanning calorimetry (DSC) —

Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT)

Plastiques — Analyse calorimétrique différentielle (DSC) —

Partie 6: Détermination du temps d'induction à l'oxydation (OIT isotherme) et de la température d'induction à l'oxydation (OIT dynamique)

Reference number
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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).

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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 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 the following URL: www.iso.org/iso/foreword.html.

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

This third edition cancels and replaces the second edition (ISO 11357-6:2008), which has been technically revised. The main changes compared to the previous edition are as follows:

— the normative references in Clause 2 have been updated;

— techniques for purge gas flow control have been extended.

A list of all parts in the ISO 11357 series can be found on the ISO website.

Introduction

The measurement of oxidation induction time or temperature described in this document provides a tool to assess the conformity of the material tested to a given formulation of plastics compounds, but it is not intended to provide the concentration of antioxidant. Different antioxidants can have different oxidation induction times or temperatures. Due to interaction of the antioxidant with other substances in the formulation, different oxidation induction times or temperatures can result even with products having the same type and concentration of antioxidant.

INTERNATIONAL STANDARD **ISO 11357-6:2018(E)**

Plastics — Differential scanning calorimetry (DSC) —

Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT)

1 Scope

This document specifies methods for the determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT) of polymeric materials by means of differential scanning calorimetry (DSC). It is applicable to polyolefin resins that are in a fully stabilized or compounded form, either as raw materials or finished products. It can be applicable to other plastics.

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 293, *Plastics — Compression moulding of test specimens of thermoplastic materials*

ISO 294-3, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 3: Small plates*

ISO 472, *Plastics — Vocabulary*

ISO 8986-2, *Plastics — Polybutene-1 (PB-1) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties*

ISO 11357-1, *Plastics — Differential scanning calorimetry (DSC) — Part 1: General principles*

ISO 17855-2, *Plastics — Polyethylene (PE) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties*

ISO 19069-2, *Plastics — Polypropylene (PP) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties*

