ICS 83.080.01 SLOVENSKÁ TECHNICKÁ NORMA September 2014

STN	**Plasty. Diferenčná snímacia kalorimetria (DSC). Časť 2: Stanovenie teploty skleného prechodu a určenie skokovej zmeny tepelnej kapacity pri teplote skleného prechodu (ISO 11357-2: 2013).**	**STN EN ISO 11357-2** 64 0748

Plastics - Differential scanning calorimetry (DSC) - Part 2: Determination of glass transition temperature and glass transition step height (ISO 11357-2:2013)

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. 08/14

Obsahuje: EN ISO 11357-2:2014, ISO 11357-2:2013

119380

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 11357-2

March 2014

ICS 83.080.01

English Version

Plastics - Differential scanning calorimetry (DSC) - Part 2: Determination of glass transition temperature and glass transition step height (ISO 11357-2:2013)

Plastiques - Analyse calorimétrique différentielle (DSC) - Partie 2: Détermination de la température de transition vitreuse et de la hauteur de palier de transition vitreuse (ISO 11357-2:2013)

Kunststoffe - Dynamische Differenz-Thermoanalyse (DSC) - Teil 2: Bestimmung der Glasübergangstemperatur und Glasübergangsstufenhöhe (ISO 11357-2:2013)

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Foreword

The text of ISO 11357-2:2013 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 11357-2:2014 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of an identical text or by endorsement, at the latest by September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 11357-2:2013 has been approved by CEN as EN ISO 11357-2:2014 without any modification.

INTERNATIONAL STANDARD

ISO 11357-2

Second edition
2013-05-01

Plastics — Differential scanning calorimetry (DSC) —

Part 2: Determination of glass transition temperature and glass transition step height

Plastiques — Analyse calorimétrique différentielle (DSC) —

Partie 2: Détermination de la température de transition vitreuse et de la hauteur de palier de transition vitreuse

Reference number
ISO 11357-2:2013(E)

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Published in Switzerland

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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.

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.

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ISO 11357-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 5, *Physical-chemical properties*.

This second edition cancels and replaces the first edition (ISO 11357-2:1999), which has been technically revised. Significant technical changes are the following:

— deletion of duplicate text contained in ISO 11357-1;

— inclusion of determination of step height;

— description of characteristic glass temperatures moved from 3.3 to 10.1;

— inclusion of additional methods of determination of T_g based on inflection point and equal-areas calculation.

ISO 11357 consists of the following parts, under the general title *Plastics — Differential scanning calorimetry (DSC)*:

— *Part 1: General principles*

— *Part 2: Determination of glass transition temperature and glass transition step height*

— *Part 3: Determination of temperature and enthalpy of melting and crystallization*

— *Part 4: Determination of specific heat capacity*

— *Part 5: Determination of characteristic reaction-curve temperatures and times, enthalpy of reaction and degree of conversion*

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

— *Part 7: Determination of crystallization kinetics*

INTERNATIONAL STANDARD ISO 11357-2:2013(E)

Plastics — Differential scanning calorimetry (DSC) —

Part 2: Determination of glass transition temperature and glass transition step height

WARNING — The use of this part of ISO 11357 may involve hazardous materials, operations, or equipment. This part of ISO 11357 does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this part of ISO 11357 to establish appropriate health and safety practices and to determine the applicability of regulatory limitations prior to use.

1 Scope

This part of ISO 11357 specifies methods for the determination of the glass transition temperature and the step height related to the glass transition of amorphous and partially crystalline plastics.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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