

**Plastics - Differential scanning calorimetry (DSC) - Part
3: Determination of temperature and enthalpy of melting
and crystallization (ISO 11357-3:2011)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 11357-3:2013 sisaldab Euroopa standardi EN ISO 11357-3:2013 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 11357-3:2013 consists of the English text of the European standard EN ISO 11357-3:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 16.01.2013.	Date of Availability of the European standard is 16.01.2013.
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English Version

Plastics - Differential scanning calorimetry (DSC) - Part 3:
Determination of temperature and enthalpy of melting and
crystallization (ISO 11357-3:2011)

Plastiques - Analyse calorimétrique différentielle (DSC) -
Partie 3: Détermination de la température et de l'enthalpie
de fusion et de cristallisation (ISO 11357-3:2011)

Kunststoffe - Dynamische Differenz-Thermoanalyse (DSC)
- Teil 3: Bestimmung der Schmelz- und
Kristallisationstemperatur und der Schmelz- und
Kristallisationsenthalpie (ISO 11357-3:2011)

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COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

The text of ISO 11357-3:2011 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 11357-3:2013 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of an identical text or by endorsement, at the latest by July 2013, and conflicting national standards shall be withdrawn at the latest by July 2013.

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Endorsement notice

The text of ISO 11357-3:2011 has been approved by CEN as a EN ISO 11357-3:2013 without any modification.

Plastics — Differential scanning calorimetry (DSC) —

Part 3:

Determination of temperature and enthalpy of melting and crystallization

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 a method for the determination of the temperatures and enthalpies of melting and crystallization of crystalline or partially crystalline plastics.

2 Normative references

The following referenced documents are indispensable for the application 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 472, *Plastics — Vocabulary*

ISO 11357-1:2009, *Plastics — Differential scanning calorimetry (DSC) — Part 1: General principles*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 472 and ISO 11357-1 and the following apply.

3.1

melting

transition stage between a fully crystalline or partially crystalline solid state and an amorphous liquid of variable viscosity

NOTE The transition, also referred to as “fusion”, is characterised by an endothermic peak in the DSC curve.

3.2

crystallization

transition stage between an amorphous liquid state and a fully crystalline or partially crystalline solid state

NOTE The transition is characterised by an exothermic peak in the DSC curve. An exception to this definition is the case of liquid crystals, where the term “amorphous liquid” should be replaced by “ordered liquid”.