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Plastics — Differential scanning calorimetry (DSC) —

Part 1: General principles

*Plastiques — Analyse calorimétrique différentielle (DSC) —
Partie 1: Principes généraux*



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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.

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 5, *Physical-chemical properties*

This third edition cancels and replaces the second edition (ISO 11357-1:2009), [3.7.2](#) of which has been technically revised.

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 crystallisation*
- *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*

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Introduction

ISO 11357 describes thermoanalytical DSC test methods which can be used for quality assurance purposes, for routine checks of raw materials and finished products or for the determination of comparable data needed for data sheets or databases. The procedures given in ISO 11357 apply as long as product standards or standards describing special atmospheres for conditioning of specimens do not specify otherwise.