

**Plastid. Polümeeride termogravimeetriline  
analüüs (TTG). Üldpõhimõtted**

Plastics - Thermogravimetry (TTG) of polymers -  
General principles

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 11358:2000 sisaldab Euroopa standardi EN ISO 11358:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 11358:2000 consists of the English text of the European standard EN ISO 11358:1997.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>Käesolev standard määrab kindlaks põhitingimused polümeeride analüüsi jaoks, kasutades termogravimeetrilist analüüsi.</p>	<p><b>Scope:</b></p>
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**ICS** 83.080.01

**Võtmesõnad:** plastid, polümeerid, termiline analüüs, testimine, üldjuhised

ICS 83.080.01

Descriptors: Plastics, testing, thermoanalysis, thermogravimetry.

**English version**

Plastics

**Thermogravimetry (TG) of polymers**

General principles  
(ISO 11358 : 1997)

Plastiques – Thermogravimétrie (TG)  
des polymères – Principes généraux  
(ISO 11358 : 1997)

Kunststoffe – Thermogravimetrie (TG)  
von Polymeren – Allgemeine Grund-  
lagen (ISO 11358 : 1997)

This European Standard was approved by CEN on 1997-03-28.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

## Foreword

International Standard

ISO 11358 : 1997 Plastics – Thermogravimetry (TG) of polymers – General principles, which was prepared by ISO/TC 61 'Plastics' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 249 'Plastics', the Secretariat of which is held by IBN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by October 1997 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 11358 : 1997 was approved by CEN as a European Standard without any modification.

## 1 Scope

**1.1** This International Standard specifies the general conditions for the analysis of polymers using thermogravimetric techniques.

**1.2** It is applicable to liquids or solids. Solid materials may be in the form of pellets, granules or powders. Fabricated shapes reduced to appropriate specimen size may also be analysed by this method.

**1.3** Thermogravimetry can be used to determine the temperature(s) and rate(s) of decomposition of polymers, and to measure at the same time the amounts of volatile matter, additives and/or fillers they contain.

**1.4** The thermogravimetric measurements may be carried out in a dynamic mode (mass change versus temperature or time under programmed conditions) or an isothermal mode (mass change versus time at constant temperature).

## 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 291:—1), *Plastics — Standard atmospheres for conditioning and testing*.

## 3 Definitions

For the purposes of this International Standard, the following definitions apply:

**3.1 thermogravimetry (TG):** A technique in which the mass of a test specimen is measured as a function of temperature or time, while the test specimen is subjected to a controlled temperature programme.

**3.2 dynamic mass-change determination:** A technique for obtaining a record of the variation of the mass of a test specimen with temperature  $T$  which is changing at a programmed rate.

**3.3 isothermal mass-change determination:** A technique for obtaining a record of the variation of the mass of a test specimen with time  $t$  at constant temperature  $T$ .

1) To be published. (Revision of ISO 291:1977)