

<b>STN</b>	<b>Plasty Stanovenie migrácie zmäkčovadiel (ISO 177: 2016)</b>	<b>STN EN ISO 177</b>
		64 0244

Plastics - Determination of migration of plasticizers (ISO 177:2016)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN ISO 177**

January 2017

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English Version

**Plastics - Determination of migration of plasticizers (ISO  
177:2016)**

Plastiques - Détermination de la migration des  
plastifiants (ISO 177:2016)

Kunststoffe - Bestimmung der Migration von  
Weichmachern (ISO 177:2016)

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## **European foreword**

This document (EN ISO 177:2017) 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of an identical text or by endorsement, at the latest by July 2017 and conflicting national standards shall be withdrawn at the latest by July 2017.

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 177:2016 has been approved by CEN as EN ISO 177:2017 without any modification.

STN EN ISO 177: 2017

INTERNATIONAL  
STANDARD

ISO  
177

Third edition  
2016-12-15

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**Plastics — Determination of migration  
of plasticizers**

*Plastiques — Détermination de la migration des plastifiants*



Reference number  
ISO 177:2016(E)

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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](http://www.iso.org/directives)).

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance*.

This third edition cancels and replaces the second edition (ISO 177:1988), of which it constitutes a minor revision with the following change:

- the normative references have been updated.

# Plastics — Determination of migration of plasticizers

## 1 Scope

This document specifies a method for the determination of the tendency of plasticizers to migrate from plastics in which they are contained into other materials or other plastics when they are brought into close contact.

NOTE 1 The surfaces into which the migration can proceed can also consist of organic surface coatings, such as lacquers.

This test is suitable

- a) for evaluating the tendency displayed by plastics, particularly in the form of films and sheets, to lose certain of their liquid constituents when they are brought into contact with materials that have an affinity for plasticizers, and
- b) for studying the tendency to migrate of plasticizers contained in a resin or a series of resins, in one or more concentrations.

In case b), standard compounds are prepared on the basis of a well-characterized resin with well-defined ratios of plasticizer to resin.

NOTE 2 When the absorbent sheets themselves contain a substance capable of migrating, simultaneous migrations can occur from the test specimens into the absorbent sheets and vice versa.

The results may also be affected by the migration of other constituents of the plastic material (for example, oligomers) or by the loss of any volatile constituents other than plasticizers from the plastic material or the absorbent layer.

## 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 291, *Plastics — Standard atmospheres for conditioning and testing*

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

ISO 294-1, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 1: General principles, and moulding of multipurpose and bar test specimens*

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

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