NSAI Standards

Irish Standard
I.S. EN ISO 14896:2009

Plastics - Polyurethane raw materials - Determination of isocyanate content (ISO 14896:2009)

I.S. EN ISO 14896:2009

Incorporating amendments/corrigenda issued since publication:

This document replaces:	*This document is based on:*	*Published:*
I.S. EN ISO 14896:2002	EN ISO 14896:2009 EN ISO 14896:2001	15 February, 2009 21 December, 2001

This document was published
under the authority of the NSAI
and comes into effect on:
31 March, 2009

ICS number:
83.080.10

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Údarás um Chaighdeáin Náisiúnta na hÉireann

I.S. EN ISO 14896:2009

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 14896

February 2009

ICS 83.080.10

Supersedes EN ISO 14896:2001

English Version

Plastics - Polyurethane raw materials - Determination of isocyanate content (ISO 14896:2009)

Plastiques - Matières premières des polyuréthannes - Détermination de la teneur en isocyanate (ISO 14896:2009)

Kunststoffe - Polyurethanrohstoffe - Bestimmung des Isocyanatanteils (ISO 14896:2008)

This European Standard was approved by CEN on 19 January 2009.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 14896:2009: E

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Foreword

This document (EN ISO 14896:2009) 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of an identical text or by endorsement, at the latest by August 2009, and conflicting national standards shall be withdrawn at the latest by August 2009.

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.

This document supersedes EN ISO 14896:2001.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 14896:2009 has been approved by CEN as a EN ISO 14896:2009 without any modification.

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I.S. EN ISO 14896:2009

INTERNATIONAL STANDARD

ISO 14896

Third edition
2009-02-15

Plastics — Polyurethane raw materials — Determination of isocyanate content

Plastiques — Matières premières des polyuréthannes — Détermination de la teneur en isocyanate

Reference number
ISO 14896:2009(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 14896 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 12, *Thermosetting materials*.

This third edition cancels and replaces the second edition (ISO 14896:2006), of which it constitutes a minor revision, the main purpose of which was to combine the standard with its amendment (ISO 14896:2006/Amd.1:2007), thereby adding a new subclause (12.1.8).

Plastics — Polyurethane raw materials — Determination of isocyanate content

SAFETY STATEMENT — Persons using this document should be familiar with normal laboratory practice, if applicable. This document does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any regulatory requirements.

1 Scope

This International Standard specifies two methods for the measurement of the isocyanate content of aromatic isocyanates used as polyurethane raw materials. Method A is primarily applicable to refined toluene diisocyanate (TDI), methylene-bis-(4-phenylisocyanate) (MDI) and their prepolymers. Method B is applicable to refined, crude or modified isocyanates derived from toluene diisocyanate, methylene-bis-(4-phenylisocyanate) and polymethylene polyphenylisocyanate. It can also be used for isomer mixtures of toluene diisocyanate, methylene-bis-(4-phenylisocyanate) and polymethylene polyphenylisocyanate. Other aromatic isocyanates may be analysed by this method if precautions are taken to verify suitability. It is not applicable to blocked isocyanates.

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 385, *Laboratory glassware — Burettes*

ISO 648, *Laboratory glassware — Single-volume pipettes*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 4787, *Laboratory glassware — Volumetric glassware — Methods for use and testing of capacity*

ISO 4788, *Laboratory glassware — Graduated measuring cylinders*

ISO 6353-1, *Reagents for chemical analysis — Part 1: General test methods*

ISO 6353-2, *Reagents for chemical analysis — Part 2: Specifications — First series*

ISO 6353-3, *Reagents for chemical analysis — Part 3: Specifications — Second series*

ISO 14898:1999, *Plastics — Aromatic isocyanates for use in the production of polyurethane — Determination of acidity*