# INTERNATIONAL STANDARD

ISO 14896

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## Plastics — Polyurethane raw materials — Determination of isocyanate content

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

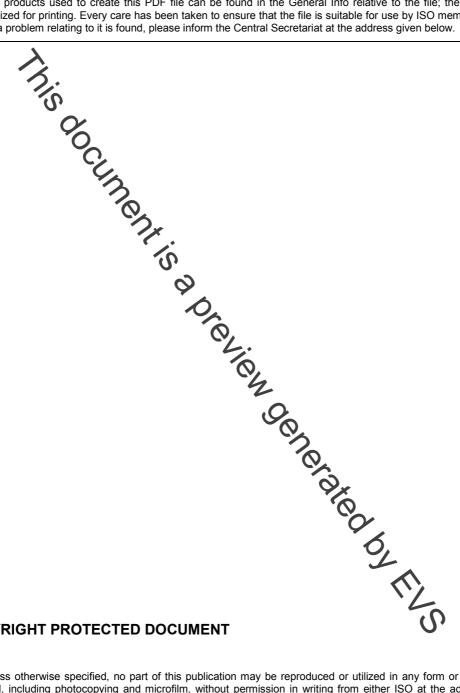


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#### **Foreword**

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 Maison 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

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 a combine the standard with its amendment (ISO 14896:2006/Amd.1:2007), thereby adding a new small purpose (12.1.8).

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### 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 polyurethate 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 his 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

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