# INTERNATIONAL STANDARD



First edition 2008-05-15

# Plastics — Polyols for use in the production of polyurethanes — Determination of basicity (total amine value), expressed as percent nitrogen

*Plastiques — Polyalcools utilisés pour la production de polyuréthannes — Détermination de la basicité (valeur totale d'amines) en pourcentage d'azote* 



Reference number ISO 25761:2008(E)

### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below

t prise Anis document is a preview generated by FLS yf



# **COPYRIGHT PROTECTED DOCUMENT**

#### © ISO 2008

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org Published in Switzerland

# Contents

Page

Forewo	ord	. iv
Introdu	uction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Sampling	2
6	Interference	2
7	Reagents	2
8	Procedure	3
9	Expression of results	3
10	PrincipleSampling Interference	4
11	Test report	5
Annex	A (informative) Determination of the ractor <i>F</i> for 0,1 mol/l perchloric acid in acetic acid	6
Bibliog	Jraphy	7
	A (informative) Determination of the ratio <i>F</i> for 0,1 mol/l perchloric acid in acetic acid	

# Foreword

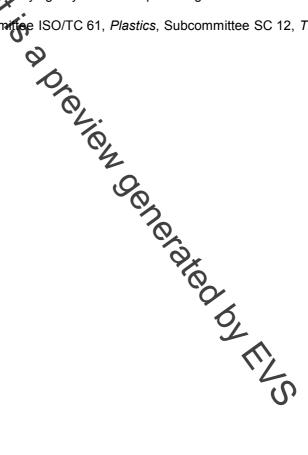
ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee 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 applied 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 25761 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 12, *Thermosetting materials*.



# Introduction

Polyurethanes are produced by the catalysed reaction of isocyanates with polyols. The basicity of the polyol employed affects the rate of reaction and speed of cure of the product. It is therefore necessary to determine the basicity in order to predict reactivity and monitor product quality.

is the is order to p. this document is a preview generated by the two of tw

this document is a preview denerated by EUS

# Plastics — Polyols for use in the production of polyurethanes — Determination of basicity (total amine value), expressed as percent nitrogen

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

**1.1** The method specified in the international Standard measures the basic constituents in polyols that are soluble in glacial acetic acid and reactive with perchloric acid. Samples containing 0,3 % to 10 % of nitrogen have been evaluated by this method. The method is applicable to polyether polyols and polyether polyol blends that are used in polyurethane cactions. The results are measures of batch-to-batch uniformity and may be used to estimate reactivity in polyurethane reactions.

**1.2** It is also permissible to express the readily in equivalents of base per gram of sample.

**1.3** This method is technically equivalent to the ASTM D 6979-03.

## 2 Normative references

The following referenced documents are indispensable to 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 3696, Water for analytical laboratory use — Specification and Cost methods

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

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

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

# 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

polyol

polymer based on ethylene oxide and/or propylene oxide which contains two or more hydroxyl groups

### 3.2

### polyurethane

polymer prepared by the reaction of an organic di- or polyisocyanate with a compound containing two or more hydroxyl groups