
**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*



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Contents

Page

Foreword.....	iv
Introduction.....	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 Precision and bias.....	4
11 Test report.....	5
Annex A (informative) Determination of the factor F for 0,1 mol/l perchloric acid in acetic acid.....	6
Bibliography.....	7

Foreword

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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.

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1 Scope

1.1 The method specified in this 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 reactions. 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 results in equivalents of base per gram of sample.

1.3 This method is technically equivalent to that in ASTM D 6979-03.

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

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*

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