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Plastics — Epoxy resins — Test methods

Plastiques — Résines époxydes — Méthodes d'essai



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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
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Contents

Page

Foreword	iv
Introduction.....	v
1 Scope	1
2 Normative references	1
3 Description of test methods	2
3.1 Physical properties	2
3.1.1 Determination of the melting range	2
3.1.2 Determination of the softening point	3
3.1.3 Determination of density	3
3.1.4 Determination of refractive index	4
3.1.5 Determination of viscosity.....	4
3.1.6 Determination of tendency to crystallize	4
3.1.7 Determination of overall volume shrinkage.....	4
3.1.8 Determination of the flash point	5
3.1.9 Estimation of colour	5
3.2 Chemical properties	5
3.2.1 Determination of epoxy equivalent.....	5
3.2.2 Determination of chlorine content.....	5
3.2.3 Determination of 1,2-glycol content	6
3.2.4 Determination of the electrical conductivity of aqueous resin extracts.....	6
3.2.5 Determination of ash.....	7
3.2.6 Determination of primary, secondary and tertiary amine group nitrogen content in amine epoxy hardeners.....	7
3.2.7 Determination of free acid in acid anhydride hardeners and accelerators	8
3.2.8 Non-volatile-matter content.....	8
Annex A (informative) List of test methods for each property	9
Bibliography.....	10

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.

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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 18280 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 12, *Thermosetting materials*.

This second edition cancels and replaces the first edition (ISO 18280:2005), which has been revised to include the following additional test methods:

- determination of the softening point (see 3.1.2);
- determination of the 1,2-glycol content (see 3.2.3);
- determination of the electrical conductivity of aqueous resin extracts (see 3.2.4).

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Introduction

The purpose of this International Standard is to present an overview of ISO test methods for characterizing epoxy resins. Those test methods that are suitable and necessary for characterizing epoxy resins prior to polymerization are listed, along with brief explanations of the principles involved.

Because of the specificity of thermosetting resins like epoxy resins, a distinction is made between the presentation of properties before crosslinking (characteristics which are useful for processing) and after crosslinking (intrinsic characteristics). Procedures for determining intrinsic characteristics of crosslinked (or cured) epoxy resins are given in ISO 3673-2.