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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Plastics — Small enclosures for conditioning and testing using aqueous solutions to maintain relative humidity at constant value

Plastiques — Petites enceintes de conditionnement et d'essai utilisant des solutions aqueuses pour maintenir l'humidité relative à une valeur constante

Reference number
ISO 483 : 1988 (E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 483 was prepared by Technical Committee ISO/TC 61, *Plastics*.

It cancels and replaces ISO Recommendation R 483 : 1966, of which it constitutes a technical revision.

Annex A forms an integral part of this International Standard.

Plastics — Small enclosures for conditioning and testing using aqueous solutions to maintain relative humidity at constant value

1 Scope

1.1 This International Standard establishes guidelines for the construction and use of enclosures with volumes less than 200 dm³, in order to obtain atmospheres of constant relative humidity at given temperatures, using saturated aqueous salt solutions, glycerol/water solutions or sulfuric acid/water solutions, for conditioning and testing plastics.

It specifies the procedures to be followed to maintain the relative humidities of the conditioning and testing atmospheres within the required tolerances, at the temperatures specified by particular International Standards.

Information is given concerning the methods of producing desired humidities in these enclosures at temperatures from 5 °C to 60 °C. The relative humidity values indicated are average values, in per cent, with permissible deviations of ± 2 .

1.2 The procedures described are intended for conditioning small quantities of materials prior to test, and for such tests as may be carried out entirely within a small enclosure, e.g. electrical tests.

The guidelines described do not apply to enclosures requiring frequent opening.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International

Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard given below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 291 : 1977, *Plastics — Standard atmospheres for conditioning and testing*.

3 Reagents and solutions

3.1 Salts (see table 1), of recognized analytical grade.

3.2 Glycerol, chemically pure.

3.3 Sulfuric acid, chemically pure.

3.4 Distilled water, or water of equivalent purity.

3.5 Saturated aqueous salt solutions (see table 1), with an excess of salt covered by the solution for the maintenance of saturation.

3.6 Aqueous glycerol solutions (see table 2), of specified concentrations.

3.7 Aqueous sulfuric acid solutions (see table 3), of specified concentrations.