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Cellular plastics, rigid — Test methods for self-skinned, high-density materials

*Plastiques alvéolaires rigides — Méthodes d'essai pour les produits à
peau intégrée et à haute densité*



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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 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 voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 9054 was prepared by Technical Committee ISO/TC 61, *Plastics*.

Annex A forms an integral part of this International Standard.

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Cellular plastics, rigid — Test methods for self-skinned, high-density materials

1 Scope

This International Standard specifies the basic test procedures for the determination of the physical properties of self-skinned, high-density (typically having an overall density in excess of 100 kg/m³) rigid cellular plastic materials.

This standard also specifies the primary methods to be used for comparison of materials similar to self-skinned, high-density materials as defined in clause 3, based upon ISO test methods and using a standard test specimen thickness. It likewise permits the use of the same test methods, when found to be suitable, for the assessment of the properties of products of different thickness, when agreed upon by the supplier and the purchaser.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were 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 editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 75:1987, *Plastics and ebonite — Determination of temperature of deflection under load*.

ISO 178:1975, *Plastics — Determination of flexural properties of rigid plastics*.

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

ISO 845:1988, *Cellular plastics and rubbers — Determination of apparent (bulk) density*.

ISO 868:1985, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness)*.

ISO 1922:1981, *Cellular plastics — Determination of shear strength of rigid materials*.

ISO 1923:1981, *Cellular plastics and rubbers — Determination of linear dimensions*.

ISO 1926:1979, *Cellular plastics — Determination of tensile properties of rigid materials*.

ISO 4897:1985, *Cellular plastics — Determination of the coefficient of linear thermal expansion of rigid materials at sub-ambient temperatures*.

ISO 6603-1:1985, *Plastics — Determination of multi-axial impact behaviour of rigid plastics — Part 1: Falling dart method*.

ISO 6603-2:1989, *Plastics — Determination of multi-axial impact behaviour of rigid plastics — Part 2: Instrumented puncture test*.

ISO 8301:—¹⁾, *Thermal insulation — Determination of steady-state thermal resistance and related properties — Heat flow meter apparatus*.

ISO 8302:—¹⁾, *Thermal insulation — Determination of steady-state thermal resistance and related properties — Guarded hot plate apparatus*.

IEC 243:1967, *Recommended methods of test for electric strength of solid insulating materials at power frequencies*.

1) To be published.