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Plastics - Poly(methyl methacrylate) sheets - Types, dimensions and characteristics - Part 1: Cast sheets

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 7823-1:2004 sisaldab Euroopa standardi EN ISO 7823-1:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 7823-1:2004 consists of the English text of the European standard EN ISO 7823-1:2003.</p> <p>This document is endorsed on 23.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This part of ISO 7823 specifies requirements for non-modified flat poly(methyl methacrylate) (PMMA) cast sheets (plates) for general-purpose use. The sheets may be colourless or coloured, and may be transparent, translucent or opaque. The thickness range of the sheets covered by this part of ISO 7823 is 1,5 mm to 25 mm.</p>	<p>Scope: This part of ISO 7823 specifies requirements for non-modified flat poly(methyl methacrylate) (PMMA) cast sheets (plates) for general-purpose use. The sheets may be colourless or coloured, and may be transparent, translucent or opaque. The thickness range of the sheets covered by this part of ISO 7823 is 1,5 mm to 25 mm.</p>
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Võtmesõnad: castings, dimensional tolerances, dimensions, methyl methacrylate, plastic, plastics sheets, polymers, properties, specification

English version

Plastics

**Poly(methyl methacrylate) sheets – Types,
dimensions and characteristics**

**Part 1: Cast sheets
(ISO 7823-1 : 2003)**

Plastiques – Plaques en poly(méthacrylate de méthyle) – Types, dimensions et caractéristiques – Partie 1: Plaques coulées (ISO 7823-1 : 2003)

Kunststoffe – Tafeln aus Polymethylmethacrylat – Typen, Maße und Eigenschaften – Teil 1: Gegossene Tafeln (ISO 7823-1 : 2003)

This European Standard was approved by CEN on 2003-05-23.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 7823-1 : 2003 Plastics – Poly(methyl methacrylate) sheets – Types, dimensions and characteristics – Part 1:
Cast sheets,

which was prepared by ISO/TC 61 ‘Plastics’ of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 249 ‘Plastics’, the Secretariat of which is held by IBN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by December 2003 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 7823-1 : 2003 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

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1 Scope

This part of ISO 7823 specifies requirements for non-modified flat poly(methyl methacrylate) (PMMA) cast sheets (plates) for general-purpose use. The sheets may be colourless or coloured, and may be transparent, translucent or opaque.

The thickness range of the sheets covered by this part of ISO 7823 is 1,5 mm to 25 mm.

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 62:1999, *Plastics — Determination of water absorption*

ISO 75-1:—¹⁾, *Plastics — Determination of temperature of deflection under load — Part 1: General test method*

ISO 75-2:—²⁾, *Plastics — Determination of temperature of deflection under load — Part 2: Plastics, ebonite and long-fibre-reinforced composites*

ISO 178:2001, *Plastics — Determination of flexural properties*

ISO 179-1:2000, *Plastics — Determination of Charpy impact properties — Part 1: Non-instrumented impact test*

ISO 291:1997, *Plastics — Standard atmospheres for conditioning and testing*

ISO 306:—³⁾, *Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST)*

ISO 489:1999, *Plastics — Determination of refractive index*

ISO 527-1:1993, *Plastics — Determination of tensile properties — Part 1: General principles*

1) To be published. (Revision of ISO 75-1:1993)

2) To be published. (Revision of ISO 75-2:1993)

3) To be published. (Revision of ISO 306:1994)

ISO 527-2:1993, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics*

ISO 877:1994, *Plastics — Methods of exposure to direct weathering, to weathering using glass-filtered daylight, and to intensified weathering by daylight using Fresnel mirrors*

ISO 1183-1:—⁴⁾, *Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pycnometer method and titration method*

ISO 1183-2:—⁴⁾, *Plastics — Methods for determining the density of non-cellular plastics — Part 2: Density gradient column method*

ISO 2039-2:1987, *Plastics — Determination of hardness — Part 2: Rockwell hardness*

ISO 2818:1994, *Plastics — Preparation of test specimens by machining*

ISO 2859-1:1999, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 4582:1998, *Plastics — Determination of changes in colour and variations in properties after exposure to daylight under glass, natural weathering or laboratory light sources*

ISO 4892-2:1994, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc sources*

ISO 4892-4:1994, *Plastics — Methods of exposure to laboratory light sources — Part 4: Open-flame carbon-arc lamps*

ISO 11359-2:1999, *Plastics — Thermomechanical analysis (TMA) — Part 2: Determination of coefficient of linear thermal expansion and glass transition temperature*

ISO 13468-1:1996, *Plastics — Determination of the total luminous transmittance of transparent materials — Part 1: Single-beam instrument*

ISO 13468-2:1999, *Plastics — Determination of the total luminous transmittance of transparent materials — Part 2: Double-beam instrument*

ISO 14782:1999, *Plastics — Determination of haze for transparent materials*

3 Terms and definitions

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

3.1

non-modified cast PMMA sheets

sheets based on homopolymers of MMA, or copolymers of MMA with acrylic or methacrylic monomers, produced by bulk polymerization in the presence of suitable initiators

3.2

flat PMMA sheets

sheets with two plane, substantially parallel surfaces

4) To be published. (Revision in parts of ISO 1183:1987)