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1.1 Overview of standards applied

STANDARDS



Here you will find an overview of the standards which govern the manufacture, dimensions and property characterisation of our semifinished products. This list makes no claim to be exhaustive.

Unless otherwise stated in the sales range section, the standards stated apply to the standard grades in clear-transparent.

For semifinished products with other properties, further guidelines may apply.

The corresponding standards sheets can be ordered in Germany from:

Beuth Verlag GmbH D-10772 Berlin Telefon (0 30) 2 60 10

In other countries, enquire with the responsible standards publishers.

Standard sheets for PLEXIGLAS® GS

DIN EN ISO 7823-1 Plastics Poly(methyl methacrylate) sheets Types, dimensions and characteristics Part 1: Cast sheets 12.2003

Standard sheets for PLEXIGLAS® XT

DIN EN ISO 7823-2 Plastics Poly(methyl methacrylate) sheets Types, dimensions and characteristics Part 2: Melt-calendered extruded sheets 12.2003

Standard sheets for multi-skin and corrugated sheets

Plastics
Poly(methylmethacrylate)
Double- and triple-skin sheets,
Test method, November 1996
DIN EN 1013
Light transmitting profiled plastic sheeting for single skin roofing

2.0 APPROVALS

| Fire ratings | | | | | |
|---------------|--------------------------|-------------------------|--------|--------|----------|
| PLEXIGLAS | ° GS for Aquarium Glazin | g, Pressure Vessels etc | :. | | •••••• |
| Transport sy | stems | | ••••• | | ******** |
| Certificate t | DIN EN ISO 9001 and 1 | 14001 | •••••• | | ******* |
| Various doc | ments | | ••••• | •••••• | ••••• |

2.1 Certificates

Fire ratings

APPROVALS



Overview of fire certificates

Fire rating of PLEXIGLAS*. Grades are divided into 'all' and 'some' grades. The classification is given in decreasing order of difficulty. PLEXIGLAS* generates in principle very little smoke, its combustion gases are non-toxic (DIN 53436) and non-corrosive.

Certificates

| Country / Certificate | Class | PLEXIGLAS* | | | |
|--|---------|-----------------|-----------------|-------------------|-------------------|
| | | GS-sheets | XT-sheets | Corrugated sheets | Multi-skin sheets |
| USA | | · | | • | • |
| UL 94 | НВ | all from 1.5 mm | all from 1.5 mm | all from 1.5 mm | all |
| Europe | | | | | |
| DIN EN 13501 | E | from 1.8 mm | from 1.8 mm | from 1.8 mm | all |
| Germany | | | | | |
| DIN 4102 | B2 | from 1.8 mm | from 1.8 mm | from 1.8 mm | all |
| German building inspectorate test report | | all from 3 mm | all from 1.8 mm | all from 1.8 mm | all |
| U.K. | | | | | |
| BS 476. Part 6+7 | Class 3 | from 3 mm | some | some | all |
| BS 4/6. Part 6+/ | Class 4 | all | all | all | |
| BS 2782. Meth. 508 A | TP (b) | 3 mm | 3 mm | 3 mm | |
| Italy | | | | | |
| CSE/RF 2/75A and 3/77 | Class 5 | all | all | all | all |
| Netherlands | | | | | |
| NEN 3883 | Class 4 | all | all | all | all |
| Austria | | | | | |
| B 3800 | B2 | all | all | all | all |
| Switzerland | | | | | |
| BKZ | IV.3 | all | all | all | all |

Certificates

| Country / Certificate | Class | PLEXIGLAS* | | | |
|------------------------------|--------------------|-------------|-----------|-------------------|-------------------|
| | | GS-sheets | XT-sheets | Corrugated sheets | Multi-skin sheets |
| Oxygen index | | | | | |
| LOI IN % to ISO 4589 | | 17.5 | 17.5 | 17.5 | |
| Ignition temperature | | | | | |
| °C to DIN 51794 | | 435 | 430 | 430 | 430 |
| Glow-wire ignition temperate | ire test method fo | r materials | | | |
| DIN EN 60695-2-12 | GWIT | 675°C | 675°C | 675°C | |
| DIN EN 60695-2-12 | GWFI | 650°C | 650°C | 650°C | |

2.1 Certificates
PLEXIGLAS® GS blocks for Aquarium Glazing, Pressure Vessels etc.

APPROVALS



| Certificate | Editor | Explanations | Material |
|------------------------|---|--|---|
| QPA-quality inspection | Internal specification of Evonik Performance Materials GmbH | Our QPA inspection is performed on PLEXIGLAS® GS blocks of 10 mm to 250 mm. This test covers all major physical properties of importance to material behavior. It is performed on each production batch and gives the customer the corresponding technical safety. Further test certificates (e. g. EN 10 204 Certificate of Compliance with the Order "2.1", Test Report "2.2", Inspection Certificate "3.1.") can be provided on the basis of this inspection. | PLEXIGLAS® GS blocks of 10 mm to 250 mm thickness |

Declarations of conformity with the following certificates can be issued, based on QPA quality inspection:

Certificates

| Certificate | Editor | Explanations | Material |
|----------------------------|--------|---|--------------------|
| Certificate AMMM00000TJ | DNV-GL | Evonik Performance Materials GmbH, Kirschenallee, 64293 Darmstadt, Germany, is certified to carry out tests on PLEXIGLAS® GS 0Z00 according to Table 1 (Mechanical and Optical Properties of Acrylic Glass) in accordance with the rules for classification (Ships-DN-VGL-RU-SHIP-Pt2 Ch3 section 5) on its own authority. Evonik Performance Materials GmbH, Kirschenallee, 64293 Darmstadt, Germany, has shown the capability of manufacturing acrylic material for windows according to the requirements of ASME PVHO-1-2012, Section 2, Article 3 (SAFETY STANDARD FOR PRESSURE VESSELS FOR HUMAN OCCUPANCY). It is hereby confirmed that Evonik Performance Materials GmbH, Kirschenallee, 64293 Darmstadt, Germany, was subjected to a material-specific assessment in accordance with the latest version of the European Pressure Equipment Directive (2014/68/EU) and is certified to manufacture primary material for components of pressure equipment from the material PLEXIGLAS® GS 0Z00. | PLEXIGLAS* GS 0Z00 |

2.1 Certificates Transport systems

APPROVALS



Existing approvals for PLEXIGLAS® in the transport systems

| Approval or regulation | Explanations | Material | Valid until |
|---------------------------------|--|-------------------------------|---------------|
| рот | for motor vehicles in USA and Canada (recognized in: Italy, Spain, Austria, Greece) | | |
| DOT-112, AS-6, M-33 to M-103 | Only for use in Item AS-6: - trailers - mobile homes - caravans | PLEXIGLAS® XT 0A000 310 mm | until revoked |
| DOT-112, AS-6, M-34 to M-84 | – special passenger cars – rear windows of convertibles – motorcycle windscreens – etc. | PLEXIGLAS® Resist 75 38 mm | until revoked |

 $PLEXIGLAS^*\ Resist\ 75\ Clear\ ORA75\ (3...8\ mm)\ is\ approved\ for\ glazing\ in\ motor\ vehicles\ for\ the\ use\ in\ Class\ E\ and\ F.$

QUALITY MANAGEMENT SYSTEM





CERTIFICATE





This is to certify that

Evonik Industries AG

Rellinghauser Straße 1-11 45128 Essen Germany

with the organizational units/sites as listed in the annex

has implemented and maintains a Quality and Environmental Management System

Scope:

Development, Production and Marketing & Sales of Specialty Chemicals

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standards:

ISO 9001: 2008

ISO 14001: 2004 + Cor 1: 2009

 Certificate registration no.
 524331 QM08 UM

 Valid from
 2017-01-04

 Valid until
 2018-09-14

 Date of certification
 2017-01-04



DQS GmbH

Frank Graichen Managing Director

IONet -

Accredited Body: DQS GmbH, August-Schanz-Straße 21, 60433 Frankfurt am Main, Germany

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2.1 Certificates

Various documents

APPROVALS



In addition to the documents already mentioned, we have a series of others for the various items of our range, such as test reports, e. g. for

- Pendulum impact test
 (e. g. for balcony guards and balustrades)
- · Anti-vandal glazing
- Test certificate
 for PLEXIGLAS® GS and XT solid sheets and PLEXIGLAS® multi-skin sheets
- Protection from falling TRAV, ETB
- RoHS
 (restriction of hazardous substances) for PLEXIGLAS® GS and XT

To make it easier for you to obtain approval for use of PLEXIGLAS*, we shall be pleased to provide you with copies of such documents. Just tell us which certificate you require or which product you would prefer.

2.2 Declaration of Conformity – Food Contact

APPROVALS



The declaration of conformity for food contact is available on request at your contact in our sales department.