PLEXIGLAS® Optical hard coated (HC)

Guarantee Statements

We guarantee the following properties for the above product according to the conditions of this guarantee statement:

**Yellowness (according to DIN 6167)**

<table>
<thead>
<tr>
<th>Yellowness index</th>
<th>Climate zone: temperate</th>
</tr>
</thead>
<tbody>
<tr>
<td>on delivery</td>
<td>max. 90 %</td>
</tr>
<tr>
<td>after 5 years</td>
<td>max. 88 %</td>
</tr>
</tbody>
</table>

**Light transmission (according to DIN 5036)**

<table>
<thead>
<tr>
<th>Transmittance</th>
<th>Climate zone: temperate</th>
</tr>
</thead>
<tbody>
<tr>
<td>on delivery</td>
<td>min. 90 %</td>
</tr>
<tr>
<td>after 5 years</td>
<td>min. 88 %</td>
</tr>
</tbody>
</table>

**Haze (according to ASTM D 1003)**

<table>
<thead>
<tr>
<th>Haze</th>
<th>Climate zone: temperate</th>
</tr>
</thead>
<tbody>
<tr>
<td>on delivery</td>
<td>max. 1 %</td>
</tr>
<tr>
<td>after 5 years</td>
<td>max. 3 %</td>
</tr>
</tbody>
</table>

**Adhesion of coating (according to DIN EN ISO 2409)**

<table>
<thead>
<tr>
<th>Adhesion</th>
<th>Climate zone: temperate</th>
</tr>
</thead>
<tbody>
<tr>
<td>on delivery</td>
<td>GT 0</td>
</tr>
<tr>
<td>after 5 years</td>
<td>GT 0</td>
</tr>
</tbody>
</table>

**Combustion behaviour**

Colourless PLEXIGLAS® Optical hard coated burns nearly smoke free and produces no acutely toxic flue gases. PLEXIGLAS® Optical is considered harmless in this respect.

**Explanations**

We guarantee the following properties for the above product for the temperate climate zone

**Yellowness**

Colourless, transparent PLEXIGLAS® Optical hard coated has a yellowing value of 0 to 1 when new. The mentioned delta of the yellowing value refers to the temperate climate zone (see picture below). The yellowing value is measured as per DIN 6167 on cleaned and polished specimens conditioned in a standardized climate at 23˚ C / 50 % RH until equilibrium is reached.

**Light transmission**

Colourless PLEXIGLAS® Optical hard coated has a light transmission when new of up to 92% depending on product type and design. The transmission factor $t_{D65}$ is measured as per DIN 5036 on cleaned and polished specimens with a thickness of 1mm, conditioned in a standardized climate at 23˚ C / 50 % RH until equilibrium is reached.
Combustion behaviour

Light absorption by smoke is measured acc. to DIN 4101-1 Annex B. PLEXIGLAS® Optical hard coated burns nearly smoke-free. The acute toxicity of flue gases is measured as per DIN 53436 and is defined as harmless and not toxic. The material is according to DIN EN 13501-1 normal flammable and is classified to class E – not emitting burning droplets. The properties guaranteed for PLEXIGLAS® apply to all climate zones.

Terms of Guarantee

Terms of guarantee, exclusions

All guarantee values shall be determined using cleaned specimens. In case of complex profiles, the measured values shall be determined on flat and plane-parallel specimen, since otherwise the material values cannot be determined with sufficient accuracy. Textured semi-finished goods – only on the more roughly textured side if both sides are textured – must be measured with the textured side facing the light source, at the original thicknesses. The products must have been stored, transported, processed, installed and used in accordance with the requirements of the subject materials. They must not have been thermally moulded or exposed to detrimental effects of harmful chemicals. For information on proper use, care and deployment of our products go to www.plexiglas.de on the internet and see the relevant print publications.

Duration of guarantee

This guarantee begins with the day of delivery to the end-user and expires upon deinstallation of the first application, intentional or wilful destruction, or 10 or 30 years from date of purchase. The shortest of the stated time spans applies in each case. Any guarantee claims shall exclusively be determined and governed by the version of this guarantee statement valid on the date of purchase of the material in question. The applicable version in each case is found at www.plexiglas.de.

In case of a guarantee claim

Any rights or claims raised hereunder shall be subject to the following,

- The user must present us a bill from the seller showing the name and address of the user, date of purchase, full product type/name and the product quantity so purchased.
- The guarantee claim must be submitted to us, during the term of this guarantee, in writing within 30 days.
- We ourselves must without delay be permitted to inspect the defect and its potential causes on site, or to have another party do so on our behalf.

Climate zones

- temperate
- hot and dry
- hot and humid
Guaranteeing

In case all terms and other conditions hereof are fulfilled such that the user has a valid claim hereunder we will replace the defective PLEXIGLAS® product ex works. If equivalent replacement material is no longer manufactured by us or can no longer be supplied, the user will receive a refund of the original purchase price. No other or further rights or claims of any kind shall be available hereunder.

Consumer rights, applicable law & jurisdiction

This guarantee does not affect or restrict any rights or claims specifically available to consumers under applicable law. This guarantee shall exclusively be governed by and construed under the laws of Germany, as applicable on the date of purchase of the goods in question, without giving effect to conflict of laws principles. The exclusive place of jurisdiction for any rights or claims from this guarantee shall be Darmstadt, Germany.

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www.roehm.com

PLEXIGLAS® is a registered trademark of Röhm GmbH, Darmstadt, Germany.
Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

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The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.