

**We guarantee****PLEXIGLAS RESIST®****solid sheets****for 10 years****on light transmission, impact resistance,  
rigidity and strength.****Product Definition**

LEXIGLAS RESIST® is an extruded highly weather-resistant sheet material made from impact-modified acrylic (polymethyl methacrylate, PMMA). The grades RESIST 45, -65, -75, -100 show increasing impact strength in this order and, as a result, prove to be tougher than conventional acrylic.

**Scope of Guarantee**

We give a 10-year guarantee on the light transmission, impact resistance, rigidity and strength of solid sheets made from PLEXIGLAS RESIST® in grades

RESIST 45 Clear 03926,

RESIST 65 Clear 03922,

RESIST 75 Clear 03921,

RESIST 100 Clear 03923

for indoor and outdoor applications.

**Guarantee Statements****1. PLEXIGLAS RESIST® retains its high light transmission.**

This means that after 10 years, PLEXIGLAS RESIST® sheets will have a transmittance  $\tau_{D65}$  which is no more than 4 percent lower than at the time of delivery.

The transmittance  $\tau_{D65}$  is measured according to DIN 5036 on clean, polished specimens which have been conditioned to the equilibrium state in the standard climate of 23 °C / 50 % RH.

**2. PLEXIGLAS RESIST® retains its impact resistance.**

This means that after 10 years, PLEXIGLAS RESIST® sheets are guaranteed to show the following values of Charpy notched impact strength  $a_{cN}$ :

RESIST 45 at least 1.5 kJ/m<sup>2</sup>;

RESIST 65 at least 3.0 kJ/m<sup>2</sup>;

RESIST 75 at least 4.0 kJ/m<sup>2</sup>;

RESIST 100 at least 4.5 kJ/m<sup>2</sup>.

The Charpy notched impact strength  $a_{cN}$  is measured on clean, unscratched specimens according to ISO 179/1 eA.

### 3. PLEXIGLAS RESIST® retains its rigidity.

This means that after 10 years, PLEXIGLAS RESIST® sheets are guaranteed to show the following modulus of elasticity  $E_t$ :

RESIST 45	at least 2600 MPa;
RESIST 65	at least 2100 MPa;
RESIST 75	at least 1900 MPa;
RESIST 100	at least 1700 MPa.

The modulus of elasticity  $E_t$  is measured in the tensile test according to ISO 527-2/1B/1 at 23 °C, as the average value established for 5 specimens with parallel faces which have been conditioned to the equilibrium state in the standard climate of 23 °C / 50 % RH.

### 4. PLEXIGLAS RESIST® XT retains its strength.

This means that after 10 years, PLEXIGLAS RESIST® sheets are guaranteed to show the following tensile strength values  $\sigma_M$ :

RESIST 45	at least 55 MPa;
RESIST 65	at least 45 MPa;
RESIST 75	at least 40 MPa;
RESIST 100	at least 35 MPa.

The tensile strength  $\sigma_M$  is measured in the tensile test according to ISO 527-2/1B/50 at 23 °C, as the average value established for 5 specimens with parallel faces and thicknesses between 1 and 4 mm, which have been conditioned to the equilibrium state in the standard climate of 23 °C / 50 % RH.

### Conditions of guarantee

The sheets

- have to be stored, transported, fabricated and installed (or used) in a manner that suits to the material;
- must not be thermoformed;
- must not be (adversely) affected by connecting, fastening and sealing elements;
- and must be protected against adverse chemical influences.

This guarantee applies throughout Europe. For guarantee questions concerning applications outside Europe, please contact us.

### Applicability

A complaint under this guarantee will be considered

- (a) if caused within the guarantee period despite demonstrable observance of the conditions of guarantee;
- (b) if made without delay during the guarantee period and
- (c) if an invoice issued by the salesperson is presented, showing the name and address of the buyer, the purchase date, complete product description and number of sheets purchased.

### If the complaint is justified, we will replace the material free of charge ex works.

If suitable replacement material cannot be supplied, the customer will be refunded with the original purchase price. Further claims are excluded.

### Guarantee period

This guarantee commences with the date of delivery to the user and ends ten years later.

® = registered trademark

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**PLEXIGLAS RESIST**  
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Certified to DIN EN ISO 9001 (Quality)  
and DIN EN ISO 14001 (Environment)

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