



Product Information

PLEXIGLAS® Resist zk6BR

Product Profile:

PLEXIGLAS® Resist zk6BR is an amorphous, impact-modified thermoplastic molding compound (PMMA-I).

Typical properties of impact-modified PLEXIGLAS® molding compounds are:

- high weather resistance
- excellent transmission and clarity
- brilliant appearance
- the pleasant feel and sound of the moldings.

PLEXIGLAS® Resist zk6BR is characterized by the following special properties:

- maximum break resistance and impact strength,
- improved resistance to stress cracking
- balanced property profile
- AMECA listing.

Application:

Used for extruding and coextruding sheets and profiles as well as for injection molding

Examples:

extruded and injection-molded luminaire covers, extruded hollow profiles, writing utensils such as stencils and fountain pens, appliance housings, coextruded profiles for window frames, gutters, downspouts, and housewares such as cutlery handles, bowls, cookie jars.

Processing:

PLEXIGLAS® Resist zk6BR can be processed on machines with 3-zone general purpose screws for engineering thermoplastics.

Physical Form / Packaging:

PLEXIGLAS® Resist zk molding compounds are supplied as pellets of uniform size in 25kg polyethylene bags or in 500kg boxes with PE lining; other packaging on request.

Properties:

| | Parameter | Unit | Standard | PLEXIGLAS® Resist zk6BR |
|--|---------------|------------------------|-------------|-------------------------|
| Mechanical Properties | | | | |
| Tensile Modulus | 1 mm/min | MPa | ISO 527 | 1800 |
| Yield Stress | 50 mm/min | MPa | ISO 527 | 45 |
| Yield Strain | 50 mm/min | % | ISO 527 | 5 |
| Nominal Strain @ Break | | % | ISO 527 | 54 |
| Charpy Impact Strength | 23°C | kJ/m ² | ISO 179/1eU | 80 |
| Thermal Properties | | | | |
| Vicat Softening Temperature | B / 50 | °C | ISO 306 | 95 |
| Glass Transition Temperature | | °C | ISO 11357 | 109 |
| Temp. of Deflection under Load | 0.45 MPa | °C | ISO 75 | 93 |
| Temp. of Deflection under Load | 1.8 MPa | °C | ISO 75 | 88 |
| Coeff. of Linear Therm. Expansion | 0 – 50°C | E-5 /°K | ISO 11359 | 11 |
| Fire Rating | | | DIN 4102 | B2 |
| Flammability UL 94 | 1.6 mm | Class | IEC 707 | HB |
| Rheological Properties | | | | |
| Melt Volume Rate, MVR | 230°C / 3.8kg | cm ³ /10min | ISO 1133 | 1.6 |
| Optical Properties | | | | |
| Luminous transmittance | d=3 mm | | | |
| Luminous transmittance | D65 | % | ISO 13468-2 | 91 |
| Haze | | | ASTM D1003 | < 2 |
| Refractive Index | | | ISO 489 | 1.49 |
| Other Properties | | | | |
| Density | | g/cm ³ | ISO 1183 | 1.16 |
| Water Absorption in Water | | % | ISO 62 | 1.8 |
| Humidity Absorption | 23°C / 50% | % | ISO 62 | 0.5 |
| Recommended Processing Conditions | | | | |
| Predrying Temperature | | °C | | max. 85 |
| Predrying Time in Desiccant-Type Drier | | h | | 2 – 3 |
| Melt Temperature | | °C | | 220 – 260 |
| Mold Temperature (Injection Molding) | | °C | | 50 – 70 |

All listed technical data are typical values intended for your guidance. They are given without obligation and do not constitute a materials specification.