

PLEXIGLAS® Resist zk5BR

Product Profile:

PLEXIGLAS® Resist zk5BR 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 zk5BR is characterized by the following special properties:

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

Application:

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

Examples:

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

Processing:

PLEXIGLAS® Resist zk5BR molding compound 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.

For more information:

For more information, e.g. Charts or lists of resistance are in the database CAMPUS® (<http://www.campusplastics.com>) free of charge.

Properties:

	Parameter	Unit	Standard	PLEXIGLAS® Resist zk5BR
Mechanical Properties				
Tensile Modulus	1 mm/min	MPa	ISO 527	2400
Yield Stress	50 mm/min	MPa	ISO 527	62
Yield Strain	50 mm/min	%	ISO 527	4.5
Nominal Strain @ Break		%	ISO 527	27
Charpy Impact Strength	23°C	kJ/m ²	ISO 179/1eU	50
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	100
Glass Transition Temperature		°C	ISO 11357	109
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	98
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	93
Coeff. of Linear Therm. Expansion	0 - 50°C	E-5 /°K	ISO 11359	9
Classes of construction product			DIN EN 13501-1	E
Flammability UL 94	1.5 mm	Class	IEC 60695-11-10	HB
Rheological Properties				
Melt Volume Rate, MVR	230°C / 3.8kg	cm ³ /10min	ISO 1133	3.3
Optical Properties				
Luminous transmittance	D65	%	ISO 13468-2	92
Haze			ASTM D1003	< 2
Refractive Index	589nm/23°C		ISO 489	1.49
Other Properties				
Density		g/cm ³	ISO 1183	1.17
Water Absorption in Water	saturation, 23°C	%	ISO 62	1.9
Humidity Absorption	23°C / 50%	%	ISO 62	0.5
Recommended Processing Conditions				
Predrying Temperature		°C		max. 90
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.

Certified to ISO 9001:2015, ISO 14001:2015 and IATF 16949:2016.

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. 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.

Röhm is a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

® = registered trademark

PLEXIGLAS and PLEXIMID are registered trademarks of Röhm GmbH.

CAMPUS is a registered trademark of Chemie Wirtschaftsförderungs-GmbH, Frankfurt / M.

Röhm GmbH • Dolivostraße 17 • 64293 Darmstadt
plexiglas.polymers@roehm.com
www.plexiglas-polymers.de
www.roehm.com

Ref. No.: MC114-E3 A1142 Date: 2019-08-27