Product Information

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/m²	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	cm³/10min	ISO 1133	3.3
Optical Properties	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	92
Haze			ASTM D1003	< 2
Refractive Index	589nm/23°C		ISO 489	1.49
Other Properties				
Density		g/cm³	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.

Evonik Performance Materials GmbH Kirschenallee 64293 Darmstadt
plexiglas.polymers@evonik.com
www.plexiglas-polymers.com

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