Product Information

PLEXIGLAS® Resist zk20

Product Profile:

PLEXIGLAS® Resist zk20 is an amorphous thermoplastic molding compound that is slightly impact-modified (PMMA-I).

Typical properties of standard PLEXIGLAS® molding compounds are:

- excellent light transmission
- good mechanical properties.

Special properties of PLEXIGLAS® Resist zk20 are:

- increased break resistance to avoid demolding fractures during injection molding
- improved resistance to stress cracking
- AMECA listing.

Application:

Used for injection molding. Profile extrusion or coextrusion are also possible.

Examples:

lighting fixtures, writing and drawing utensils, domestic appliances and sanitaryware

Processing:

PLEXIGLAS® Resist zk20 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, packaged in 25kg polyethylene bags or 500kg boxes with PE lining; other packaging on request.

Properties:

	Parameter	Unit	Standard	PLEXIGLAS® Resist zk20
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	22
Charpy Impact Strength	23°C	kJ/m²	ISO 179/1eU	25
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	102
Glass Transition Temperature		°C	IEC 10006	112
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	100
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	96
Coeff. of Linear Therm. Expansion	0 - 50°C	E-5 /°K	ISO 11359	10
Flammability UL 94	1.6 mm	Class	IEC 707	HB
Rheological Properties				
Melt Volume Rate, MVR	230°C / 3.8kg	cm³/10min	ISO 1133	2
Optical Properties	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	91
Refractive Index			ISO 489	1.49
Other Properties				
Density		g/cm³	ISO 1183	1.17
Humidity Absorption	23°C / 50%	%	ISO 62	0.3
Recommended Processing Conditions				
Predrying Temperature		°C		max. 90
Predrying Time in Desiccant-Type Drier		h		2 - 3
Melt Temperature		°C		230 - 240
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.