

Product Information

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PLEXIGLAS® df23 zk6BR Molding Compound

Product Profile:

PLEXIGLAS® df23 zk6BR, based on PLEXIGLAS® zk6BR, is an impact modified molding compound characterized by diffuse scattering of light.

Typical properties of impact modified PLEXIGLAS® molding compound are

- high break resistance and impact strength
- improved resistance to stress cracking
- good weather resistance
- high surface hardness and mar resistance
- the pleasant feel and sound of the moldings.

PLEXIGLAS® df23 zk6BR is characterized by the following special properties:

- excellent lightdiffusion combined with excellent light transmission
- matte surfaces can be obtained by varying the extrusion parameters.

Application:

Used for extruding profiles and sheets, but also for injection molding items for lighting engineering applications

Examples:

applications that call for light diffusion combined with optimum transmission

Processing:

PLEXIGLAS® df23 zk6BR can be processed on extruders with 3-zone general purpose screws for engineering thermoplastics.

The matte finish of profile surfaces depends very much on machine design (calibrating unit, polishing rolls) and cooling conditions. It can be enhanced by controlled temperature reduction.

Physical Form / Packaging:

PLEXIGLAS® df molding compounds are supplied as pellets of uniform size, packaged in 25kg polyethylene bags; other packaging on request.

Properties:

	Parameter	Unit	Standard	PLEXIGLAS® df23 zk6BR
Mechanical Properties				
Tensile Modulus	1 mm/min	MPa	ISO 527	1900
Yield Stress	50 mm/min	MPa	ISO 527	46
Yield Strain	50 mm/min	%	ISO 527	5
Nominal Strain @ Break		%	ISO 527	36
Charpy Impact Strength	23°C	kJ/m ²	ISO 179/1eU	50
Charpy Notched Impact Strength	23°C	kJ/m ²	ISO 179/1	6
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	91
Glass Transition Temperature		°C	IEC 10006	107
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	99
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
Fire Rating			DIN 4102	B2
Glow Wire Ignition Temperature		°C	IEC 60695-2	700
Rheological Properties				
Melt Volume Rate, MVR	230°C / 3.8kg	cm ³ /10min	ISO 1133	1.3
Optical Properties				
	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	81
Half-Value Angle		°	DIN 5036	21
Other Properties				
Density		g/cm ³	ISO 1183	1.15
Recommended Processing Conditions				
Predrying Temperature		°C		max. 80
Predrying Time in Desiccant-Type Drier		h		2 – 3
Melt Temperature		°C		230 – 260
Die Temperature (Extrusion)		°C		ca. 260

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

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The Business Unit Performance Polymers of Evonik is a worldwide manufacturer of PMMA molding compounds sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian Continent and under the trademark ACRYLITE® in the Americas.

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