

## Product Information

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### PLEXIGLAS® df20 8N Molding Compound

#### Product Profile:

PLEXIGLAS® df20 8N molding compound based on PLEXIGLAS® 8N are characterized by diffuse scattering of light.

Besides showing the familiar properties of standard PLEXIGLAS® molding compound, such as

- excellent weatherability,
- high surface hardness and mar resistance,

PLEXIGLAS® df20 8N is special in that they combine

- good diffusing power with excellent light transmission.

#### Application:

Used for injection molding items for lighting engineering applications

#### Examples:

displays, fiber optics, projection screens, lighting fixtures and similar applications in lighting engineering.

#### Processing:

PLEXIGLAS® df20 8N can be processed on injection molding machines with 3-zone general purpose screws for thermoplastics.

#### Physical Form / Packaging:

PLEXIGLAS® df20 8N molding compound is supplied as pellets of uniform size, packaged in two-ply, 25kg polyethylene bags; other packaging on request.

**Properties:**

	Parameter	Unit	Standard	PLEXIGLAS® df20 8N
<b>Mechanical Properties</b>				
Tensile Modulus	1 mm/min	MPa	ISO 527	3300
Stress @ Break	5 mm/min	MPa	ISO 527	74
Strain @ Break	5 mm/min	%	ISO 527	5
Charpy Impact Strength	23°C	kJ/m <sup>2</sup>	ISO 179/1eU	19
<b>Thermal Properties</b>				
Vicat Softening Temperature	B / 50	°C	ISO 306	108
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	103
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	98
Coeff. of Linear Therm. Expansion	0 – 50°C	E-5 /°K	ISO 11359	6.3
Fire Rating			DIN 4102	B2
<b>Rheological Properties</b>				
Melt Volume Rate, MVR	230°C / 3.8kg	cm <sup>3</sup> /10min	ISO 1133	2.5
<b>Optical Properties</b>				
Luminous transmittance	d=3 mm			
	D65	%	ISO 13468-2	88
Half-Value Angle		°	DIN 5036	1.6
<b>Other Properties</b>				
Density		g/cm <sup>3</sup>	ISO 1183	1.19
<b>Recommended Processing Conditions</b>				
Predrying Temperature		°C		max. 95
Predrying Time in Desiccant-Type Drier		h		2 – 3
Melt Temperature		°C		220 – 260
Mold Temperature (Injection Molding)		°C		60 – 90

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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