

## Product Information

Page 1 of 2

### PLEXIGLAS® df22 8N Molding Compound

#### Product Profile:

PLEXIGLAS® df22 8N, based on PLEXIGLAS® 8N, is characterized by diffuse scattering of light.

Typical properties of PLEXIGLAS® molding compound are

- good flow
- high mechanical strength, surface hardness and mar resistance
- very good weather resistance.

Special properties of PLEXIGLAS® df22 8N are

- very good lightdiffusion combined with excellent light transmission.

#### Application:

Used for injection molding items for lighting engineering applications

#### Examples:

luminaire covers, projection screens and similar applications

#### Processing:

PLEXIGLAS® df22 8N can be processed on injection molding machines with 3-zone general purpose screws for engineering thermoplastics.

#### 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® df22 8N
<b>Mechanical Properties</b>				
Tensile Modulus	1 mm/min	MPa	ISO 527	3300
Stress @ Break	5 mm/min	MPa	ISO 527	67
Strain @ Break	5 mm/min	%	ISO 527	3.5
Charpy Impact Strength	23°C	kJ/m <sup>2</sup>	ISO 179/1eU	18
Charpy Notched Impact Strength	23°C	kJ/m <sup>2</sup>	ISO 179/1	1.8
<b>Thermal Properties</b>				
Vicat Softening Temperature	B / 50	°C	ISO 306	109
Glass Transition Temperature		°C	IEC 10006	110
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
Glow Wire Ignition Temperature		°C	IEC 60695-2	700
<b>Rheological Properties</b>				
Melt Volume Rate, MVR	230°C / 3.8kg	cm <sup>3</sup> /10min	ISO 1133	2.4
<b>Optical Properties</b>				
Luminous transmittance	d=3 mm			
	D65	%	ISO 13468-2	86
Half-Value Angle		°	DIN 5036	12.5
<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.

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.

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.

® = registered trademark

PLEXIGLAS, PLEXALLOY, PLEXIMID and PLEX are registered trademarks of Evonik Röhm GmbH, Darmstadt, Germany