

## Product Information

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### PLEXIGLAS® 8N Molding Compound

#### Product Profil:

PLEXIGLAS® 8N is an amorphous thermoplastic molding compound (PMMA).

Typical properties of PLEXIGLAS® molding compounds are:

- good flow
- high mechanical strength, surface hardness and abrasion resistance
- high light transmission
- very good weather resistance
- free colorability due to crystal clarity

Special properties of PLEXIGLAS® 8N are:

- optimum mechanical properties
- maximum heat deflection temperature
- good flow / melt viscosity
- AMECA listing.

#### Application:

Used for injection molding optical and technical items.

#### Examples:

optical waveguides, luminaire covers, automotive lighting, instrument cluster covers, optical lenses, displays, etc.

#### Processing:

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

#### Physical Form / Packaging:

PLEXIGLAS® molding compounds are supplied as pellets of uniform size, packaged in 25kg polyethylene bags or in 500kg boxes with PE lining; other packaging on request.

**Properties:**

	Parameter	Unit	Standard	PLEXIGLAS® 8N
<b>Mechanical properties</b>				
Tensile modulus	1 mm/min	MPa	ISO 527	3300
Stress at break	5 mm/min	MPa	ISO 527	77
Strain at break	5 mm/min	%	ISO 527	5.5
Charpy impact strength	23°C	kJ/m <sup>2</sup>	ISO 179/1eU	20
<b>Thermal properties</b>				
Vicat softening temperature	B / 50	°C	ISO 306	108
Glass transition temperature		°C	IEC 10006	117
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	8
Fire rating			DIN 4102	B2
<b>Rheological properties</b>				
Melt volume rate, MVR	230 / 3.8	cm <sup>3</sup> /10min	ISO 1133	3
<b>Optical properties</b>				
Transmission factor	d=3 mm			
Transmission factor	D65/10°	%	ISO 13468	92
Haze			ASTM D1003	< 0.5
Refractive index			ISO 489	1.49
<b>Other properties</b>				
Density		g/cm <sup>3</sup>	ISO 1183	1.19
<b>Recommended processing conditions</b>				
Predrying temperature		°C		max. 98
Predrying time in desiccant-type drier		h		2 - 3
Melt temperature		°C		220 - 260
Cylinder 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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