Plexiglas® 6N

Polymethyl Methacrylate Acrylic

Evonik Industries AG

Message:

Product Profile:
PLEXIGLAS® 6N is an amorphous thermoplastic molding compound (PMMA).
Typical properties of PLEXIGLAS® molding compounds are:
good flow
high mechanical strength, surface hardness and mar resistance
high light transmission
excellent weather resistance
free colorability due to crystal clarity.
The special properties of PLEXIGLAS® 6N are:
very good mechanical properties
high heat deflection temperature
excellent flow / melt viscosity
Application:
Particularly suitable for injection molding optical and technical items.
Examples:
optical waveguides, luminaire covers, automotive lighting, instrument cluster covers, optical lenses, displays, cuvettes, medical applications etc.
Processing:
PLEXIGLAS® 6N 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.

General Information	
Features	Good Colorability
	Good Weather Resistance
	High Flow
	High Hardness
	High Strength
Uses	Automotive Applications
	Automotive Backlights
	Displays
	Lenses
	Medical Devices
	Optical Applications
	Protective Coverings
Processing Method	Injection Blow Molding
Multi-Point Data	Creep Modulus vs. Time (ISO 11403-1)
	Isochronous Stress vs. Strain (ISO 11403-1)
	Isothermal Stress vs. Strain (ISO 11403-1)
	Secant Modulus vs. Strain (ISO 11403-1)
	Shear Modulus vs. Temperature (ISO 11403-1)

Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/3.8 kg)	12.0	cm³/10min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	3200	MPa	ISO 527-2/1
Tensile Stress (Break)	67.0	MPa	ISO 527-2/5
Tensile Strain (Break)	3.0	%	ISO 527-2/5
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength (23°C)	20	kJ/m²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Vicat Softening Temperature	96.0	°C	ISO 306/B50
CLTE - Flow (0 to 50°C)	8.0E-5	cm/cm/°C	ISO 11359-2
Flammability	**Nominal Value**		**Test Method**
Flame Rating (1.60 mm)	HB		UL 94
Fire Rating	B2		DIN 4102
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index	1.490		ISO 489
Transmittance [1]	92.0	%	ISO 13468-2
Injection	**Nominal Value**	**Unit**	
Drying Temperature	< 85.0	°C	
Drying Time	2.0 to 3.0	hr	
Processing (Melt) Temp	220 to 260	°C	
Mold Temperature	60.0 to 90.0	°C	
NOTE			
1.	D65		

Recommended distributors for this material

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WECHAT