

Plexiglas® 8N

Polymethyl Methacrylate Acrylic
Evonik Industries AG

Message:

Product Profile:
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.

General Information	
UL YellowCard	E65495-100849262
Features	Amorphous
	Good Abrasion Resistance
	Good Colorability
	Good Flow
	Good Weather Resistance
	High Hardness
	High Strength
Uses	Automotive Applications
	Automotive Backlights
	Displays
	Lenses
	Optical Applications
	Protective Coverings
Forms	Pellets
Processing Method	Injection 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)

Specific Volume vs Temperature (ISO 11403-2)

Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/3.8 kg)	3.00	cm ³ /10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3300	MPa	ISO 527-2/1
Tensile Stress (Break)	77.0	MPa	ISO 527-2/5
Tensile Strain (Break)	5.5	%	ISO 527-2/5
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength (23°C)	20	kJ/m ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	103	°C	ISO 75-2/B
1.8 MPa, Unannealed	98.0	°C	ISO 75-2/A
Glass Transition Temperature	117	°C	ISO 11357-2
Vicat Softening Temperature	108	°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
Haze	< 0.50	%	ASTM D1003
Injection	Nominal Value	Unit	
Drying Temperature	< 98.0	°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		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

