

**PRODUCT INFORMATION**

# PLEXIGLAS® 7N

**Product Profile:**

PLEXIGLAS® 7N 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
- very good weather resistance
- free colorability due to crystal clarity.

Special properties of PLEXIGLAS® 7N molding compound are:

- very good mechanical properties
- high heat deflection temperature
- very 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® 7N 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.

**For more information:**

For more information, e.g. Charts or lists of resistance are in the database CAMPUS® (<http://www.campusplastics.com>) free of charge.

## Properties:

	Parameter	Unit	Standard	PLEXIGLAS® 7N
<b>Mechanical Properties</b>				
Tensile Modulus	1 mm/min	MPa	ISO 527	3200
Stress @ Break	5 mm/min	MPa	ISO 527	73
Strain @ Break	5 mm/min	%	ISO 527	3.5
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	103
Glass Transition Temperature		°C	ISO 11357	110
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	100
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	95
Coeff. of Linear Therm. Expansion	0 - 50°C	E-5 /°K	ISO 11359	8
Classes of construction product			DIN EN 13501-1	E
Flammability UL 94	1.5 mm	Class	IEC 60695-11-10	HB
<b>Rheological Properties</b>				
Melt Volume Rate, MVR	230°C / 3.8kg	cm <sup>3</sup> /10min	ISO 1133	6
<b>Optical Properties</b>				
Luminous transmittance	d=3 mm	%	ISO 13468-2	92
Haze			ASTM D1003	< 0.5
Refractive Index	589nm/23°C		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. 93
Predrying Time in Desiccant-Type Drier		h		2 - 3
Melt Temperature		°C		220 - 260
Mold Temperature (Injection Molding)		°C		55 - 85

All listed technical data are typical values intended for your guidance. They are given without obligation and do not constitute a materials specification.

Certified to ISO 9001:2015, ISO 14001:2015 and IATF 16949:2016.

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