

## Product Information

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### PLEXIGLAS® 7M Molding Compound

#### Product Profile:

PLEXIGLAS® 7M molding compound is based on polymethyl methacrylate (PMMA).

Besides showing the familiar properties of PLEXIGLAS® 7H molding compounds, such as

- excellent light transmission and brilliance
- excellent weatherability
- high mechanical strength, surface hardness and abrasion resistance.

PLEXIGLAS® 7M is special in that it

- better flowing behavior,
- AMECA listing.

#### Application:

PLEXIGLAS® 7M is particularly suitable for extruding profiles and panels for use in lighting engineering.

#### Examples:

lighting fixtures, displays and similar extruded items for technical purposes.

#### Processing:

PLEXIGLAS® 7M can be processed on extruders with 3-zone general purpose screws for thermoplastics.

#### Physical Form / Packaging:

PLEXIGLAS® molding compound is supplied as pellets of uniform size in two-ply, 25kg polyethylene bags; other packaging on request.

**Properties:**

	Parameter	Unit	Standard	PLEXIGLAS® 7M
<b>Mechanical properties</b>				
Tensile modulus	1 mm/min	MPa	ISO 527	3200
Stress at break	5 mm/min	MPa	ISO 527	69
Strain at break	5 mm/min	%	ISO 527	4
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	104
Glass transition temperature		°C	IEC 10006	108
Coeff. of linear therm. Expansion	0 – 50°C	E-5 /°K	ISO 11359	8
Flammability UL 94	1.6 mm	Class	IEC 707	HB
<b>Rheological properties</b>				
Melt volume rate, MVR	230 / 3.8	cm <sup>3</sup> /10min	ISO 1133	2.9
<b>Optical properties</b>				
Transmission factor	d=3 mm			
Transmission factor	D65/10°	%	ISO 13468	92
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. 94
Predrying time in desiccant-type drier		h		2 – 3
Melt temperature		°C		220 – 260
Cylinder temperature		°C		220 – 260
Die temperature (extrusion)		°C		220 – 260

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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