

## PLEXIGLAS® 7M

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### Product Profile:

PLEXIGLAS® 7M 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 @ Break	5 mm/min	MPa	ISO 527	69
Strain @ 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°C / 3.8kg	cm <sup>3</sup> /10min	ISO 1133	2.9
<b>Optical Properties</b>				
Luminous transmittance	d=3 mm			
	D65	%	ISO 13468-2	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
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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The Business Unit Performance Polymers of Evonik is a worldwide manufacturer of PMMA molding compounds sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian Continent and under the trademark ACRYLITE® in the Americas.

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