

## PRODUCT INFORMATION

### PLEXIMID® TT70

#### Product Profile:

PLEXIMID® TT70 is a highly heat distortion-resistant poly(n-methyl methacrylimide) (PMMI).

Besides showing the properties common to all PLEXIMID® molding compounds, such as

- excellent transmission and clarity,
- very high mechanical strength and rigidity,
- good weather resistance.

PLEXIMID® TT70 has the following specific characteristics:

- high stability of the optical characteristics at long-lasting thermal load,
- highest heat deflection temperature under load.

#### Application:

PLEXIMID® molding compound is particularly suitable for injection molding of items meant for applications that involve maximum thermal loads.

#### Examples:

automotive lighting, light guides, lenses, fiber optics, luminaire covers, sight glasses, cover lenses.

#### Processing:

PLEXIMID® molding compound can be processed on injection molding machines and extruders with PMMA suited 3-zone general purpose screws for thermoplastics.

Note: After a partial removal, we strongly recommend resealing the container in order to prevent permeation of moisture.

#### Physical Form / Packaging:

PLEXIMID® is supplied as pellets of uniform size in aluminum-laminated, 25kg polyethylene bags; other packaging on request.

## Properties:

	Parameter	Unit	Standard	PLEXIMID® TT70
<b>Mechanical Properties</b>				
Tensile Modulus	1 mm/min	MPa	ISO 527	4000
Stress @ Break	5 mm/min	MPa	ISO 527	80
Strain @ Break	5 mm/min	%	ISO 527	3
Charpy Impact Strength	23°C	kJ/m²	ISO 179/1eU	20
<b>Thermal Properties</b>				
Vicat Softening Temperature	B / 50	°C	ISO 306	170
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	158
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	149
Classes of construction product			DIN EN 13501-1	E
<b>Rheological Properties</b>				
Melt Volume Rate, MVR	260°C / 10kg	cm³/10min	ISO 1133	1.7
<b>Optical Properties</b>				
	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	91
Refractive Index	589nm/23°C		ISO 489	1.54
<b>Other Properties</b>				
Density		g/cm³	ISO 1183	1.21
Water Absorption in Water	saturation, 23°C	%	ISO 62	6
<b>Recommended Processing Conditions</b>				
Predrying Temperature		°C		max. 120
Predrying Time in Desiccant-Type Drier		h		2 - 3
Melt Temperature		°C		260 - 290
Mold Temperature (Injection Molding)		°C		ca. 130

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.