

## PRODUCT INFORMATION

# PLEXIMID® TT50

### Product Profile:

PLEXIMID® TT50 is a highly heat distortion-resistant poly(n-methyl methacrylimide) (PMMI).

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

- high heat deflection temperature under load,
- excellent transmission and clarity,
- very high strength and rigidity, as well as
- good weather resistance.

PLEXIMID® TT50 is special in that it is

- listed by AMECA.

### Application:

PLEXIMID® molding compound is particularly suitable for injection molding of items meant for applications that involve high heat 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.

### 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	PLEXIMID® TT50
<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/m <sup>2</sup>	ISO 179/1eU	20
<b>Thermal Properties</b>				
Vicat Softening Temperature	B / 50	°C	ISO 306	150
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	140
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	132
Coeff. of Linear Therm. Expansion	0 - 50°C	E-5 /°K	ISO 11359	5.3
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	260°C / 10kg	cm <sup>3</sup> /10min	ISO 1133	5
<b>Optical Properties</b>				
Luminous transmittance	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	91
Refractive Index	589nm/23°C		ISO 489	1.53
<b>Other Properties</b>				
Density		g/cm <sup>3</sup>	ISO 1183	1.21
<b>Recommended Processing Conditions</b>				
Predrying Temperature		°C		max. 100
Predrying Time in Desiccant-Type Drier		h		2 - 3
Melt Temperature		°C		250 - 280
Mold Temperature (Injection Molding)		°C		ca. 110

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

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