

ACRYMID® TT50

Product Profile:

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

Besides showing the properties common to all ACRYMID® 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.

ACRYMID® TT50 is special in that it is

- listed by AMECA.

Application:

ACRYMID® 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:

ACRYMID® molding compound can be processed on injection molding machines with 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.

Packaging:

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

Properties:

	Parameter	Unit	Standard	ACRYMID® TT50
Mechanical Properties				
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 ²	ISO 179/1eU	20
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	150
Glass Transition Temperature		°C	ISO 11357	151
Deflection Temperature Under Load	0.45 MPa	°C	ISO 75	140
Deflection Temperature 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
Rheological Properties				
Melt Volume Rate, MVR	260°C / 10kg	cm ³ /10min	ISO 1133	5
Optical Properties				
	d = 1mm			
Luminous transmittance	D65	%	ISO 13468-2	91
Refractive Index			ISO 489	1.53
Other Properties				
Density		g/cm ³	ISO 1183	1.21
Recommended Processing Conditions				
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

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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