

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.

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® TT70
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	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
Rheological Properties				
Melt Volume Rate, MVR	260°C / 10kg	cm ³ /10min	ISO 1133	1.7
Optical Properties				
Luminous transmittance	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	91
Refractive Index	589nm/23°C		ISO 489	1.54
Other Properties				
Density		g/cm ³	ISO 1183	1.21
Water Absorption in Water	saturation, 23°C	%	ISO 62	6
Recommended Processing Conditions				
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.

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Röhm is a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

® = registered trademark

PLEXIGLAS and PLEXIMID are registered trademarks of Röhm GmbH.

CAMPUS is a registered trademark of Chemie Wirtschaftsförderungs-GmbH, Frankfurt / M.

Röhm GmbH • Dolivostraße 17 • 64293 Darmstadt
plexiglas.polymers@roehm.com
www.roehm.com

Ref. No.: MC209-E A1142 Date: 2019-09-25