

Huntsman IROGRAN® A 70 H 4673 M Polyester-Based TPU-Injection Molding Grade

Categories: [Polymer](#); [Thermoplastic](#); [Elastomer, TPE](#); [Polyurethane TPE](#); [Polyurethane, TP](#); [Thermoplastic Polyurethane, Elastomer, Polyester Grade](#)

Material Introduction: IROGRAN A 70 H 4673 M is a soft polyester based thermoplastic polyurethane intended for injection molding applications.

Notes: IROGRAN A 70 H 4673 M is part of the HUNTSMAN injection molding product range. It is processable at low temperatures and offers a specially designed, flexible material suitable for moldings.

Performance Features:

- High transparency
- Soft type
- Good melt flow
- Phthalate free
- High elasticity
- Easy coloring

Information provided by Huntsman

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.15 g/cc	0.0415 lb/in ³	ASTM D792
Linear Mold Shrinkage	0.0090 cm/cm	0.0090 in/in	ASTM D995
Melt Index of Compound	45 g/10 min @Load 5.00 kg, Temperature 190 °C	45 g/10 min @Load 11.0 lb, Temperature 374 °F	cm ³ /10 min

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	71	71	ASTM D2240
Hardness, Shore D	21	21	ASTM D2240
Tensile Strength at Break	35.0 MPa	5080 psi	DIN 53504
Elongation at Break	880 %	880 %	DIN 53504
100% Modulus	3.40 MPa @Strain 100 %	493 psi @Strain 100 %	DIN 53504
300% Modulus	7.00 MPa @Strain 300 %	1020 psi @Strain 300 %	DIN 53504
Tear Strength	45.1 kN/m	257 pli	DIN 53515
Abrasion	35	35	[mm ³]; ISO 4649
Compression Set 	34 % @Temperature 23.0 °C, Time 252000 sec	34 % @Temperature 73.4 °F, Time 70.0 hour	ASTM D395
	48 % @Temperature 70.0 °C, Time 86400 sec	48 % @Temperature 158 °F, Time 24.0 hour	ASTM D395

Processing Properties	Metric	English	Comments
Feed Temperature	175 °C	347 °F	Injection
Front Barrel Temperature	180 °C	356 °F	Injection
Adapter Temperature	180 °C	356 °F	Injection
Die Temperature	170 °C	338 °F	Injection
Melt Temperature	145 - 170 °C	293 - 338 °F	

Descriptive Properties

TMA High	165°C
TMA Low	120°C

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.