

## Huntsman IROGRAN® PS442-202 TPU-Polyester

Category : Polymer , Thermoplastic , Polyurethane, TP , Thermoplastic Polyurethane (TPUR), Polyester Grade

### Material Notes:

Introduction: IROGRAN PS440-202 is a high performance polyester based thermoplastic polyurethane intended for extrusion and injection molding applications. IROGRAN PS440-202 is part of the HUNTSMAN film and sheet / technical extrusion product range and offers a specially designed, flexible material with a broad processing window particularly suitable for film and sheet, and textile laminations, polyblends, and industrial articles. Performance Features: Medium hardness Tough Good low temperature properties High flexibility Wide processing window Applications: Textile lamination Polyblends Industrial articles Information provided by Alliance Polymers

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Huntsman-IROGRAN-PS442-202-TPU-Polyester.php](http://www.lookpolymers.com/polymer_Huntsman-IROGRAN-PS442-202-TPU-Polyester.php)

Physical Properties	Metric	English	Comments
Density	1.21 g/cc	0.0437 lb/in <sup>3</sup>	Injection molded parts; ASTM D792
Linear Mold Shrinkage	0.0040 cm/cm	0.0040 in/in	Injection molded; ASTM D955
Melt Index of Compound	25 g/10 min @Load 21.6 kg, Temperature 190 °C	25 g/10 min @Load 47.6 lb, Temperature 374 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	88	88	Injection molded parts; ASTM D2240
Tensile Strength at Break	48.0 MPa	6960 psi	0.025" extruded film; DIN 53504
Elongation at Break	650 %	650 %	0.025" extruded film; DIN 53504
100% Modulus	0.00560 GPa	0.812 ksi	0.025" extruded film; DIN 53504
300% Modulus	0.0100 GPa	1.45 ksi	0.025" extruded film; DIN 53504
Rebound	30 %	30 %	Bayshore; ASTM D2632
Tear Strength	62.1 kN/m	354 pli	0.025" extruded film; ASTM D624
Abrasion	30	30	mm <sup>3</sup> , Injection molded; DIN 53516
Compression Set	30 % @Temperature 22.8 °C, Time 252000 sec	30 % @Temperature 73.0 °F, Time 70.0 hour	Injection molded; ASTM D395
	80 % @Temperature 70.0 °C, Time 86400 sec	80 % @Temperature 158 °F, Time 24.0 hour	Injection molded; ASTM D395

Mechanical Properties	Metric	English	Comments
Melting Point	142 - 170 °C	288 - 338 °F	0.025" extruded film,

Thermal Properties	Metric	English	Comments
Processing Properties	Metric	English	Comments
Feed Temperature	180 °C	356 °F	Extrusion
Middle Barrel Temperature	190 °C	374 °F	Extrusion
Adapter Temperature	190 °C	374 °F	Extrusion
Die Temperature	190 °C	374 °F	Extrusion

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China