

BASF Elastollan R 1000 20% Glass Filled TPUR

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

Material Notes:

Description: Thermoplastic Polyester Polyurethane Elastomers with exceptional properties, very high impact resistance, high modulus with at the same time elasticity, low coefficient of thermal expansion comparable with steel and aluminum, low mold shrinkage and ease of painting. Typical Applications: Automotive body and rocker panels, underbody sealants, technical moldings e.g. plugs and ski tips. Note: Quoted results are from measurements on injection molded test platens, post tempered for 20 hours at 100°C Information provided by BASF

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Elastollan-R-1000-20-Glass-Filled-TPUR.php

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0491 lb/in ³	ISO 1183-1-A

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	60	60	ISO 686
Tensile Strength	50.0 MPa	7250 psi	50 mm/min; ISO 37
	24.0 MPa	3480 psi	50 mm/min; ISO 527-2
	@Strain 5.00 %, Temperature 60.0 °C	@Strain 5.00 %, Temperature 140 °F	
	28.0 MPa	4060 psi	50 mm/min; ISO 527-2
	@Strain 5.00 %, Temperature 40.0 °C	@Strain 5.00 %, Temperature 104 °F	
	32.0 MPa	4640 psi	50 mm/min; ISO 527-2
	@Strain 10.0 %, Temperature 60.0 °C	@Strain 10.0 %, Temperature 140 °F	
	36.0 MPa	5220 psi	50 mm/min; ISO 527-2
	@Strain 5.00 %, Temperature 23.0 °C	@Strain 5.00 %, Temperature 73.4 °F	
	38.0 MPa	5510 psi	50 mm/min; ISO 527-2
	@Strain 15.0 %, Temperature 60.0 °C	@Strain 15.0 %, Temperature 140 °F	
	45.0 MPa	6530 psi	50 mm/min; ISO 527-2
	@Strain 15.0 %, Temperature 40.0 °C	@Strain 15.0 %, Temperature 104 °F	
	50.0 MPa	7250 psi	50 mm/min; ISO 527-2
	@Strain 30.0 %,	@Strain 30.0 %,	

Mechanical Properties	Temperature 40.0 °C Metric	Temperature 104 °F English	Comments
	53.0 MPa	7690 psi	
	@Strain 5.00 %, Temperature 0.000 °C	@Strain 5.00 %, Temperature 32.0 °F	50 mm/min; ISO 527-2
	58.0 MPa	8410 psi	
	@Strain 15.0 %, Temperature 23.0 °C	@Strain 15.0 %, Temperature 73.4 °F	50 mm/min; ISO 527-2
	61.0 MPa	8850 psi	
	@Strain 25.0 %, Temperature 23.0 °C	@Strain 25.0 %, Temperature 73.4 °F	50 mm/min; ISO 527-2
	70.0 MPa	10200 psi	
	@Strain 10.0 %, Temperature 0.000 °C	@Strain 10.0 %, Temperature 32.0 °F	50 mm/min; ISO 527-2
	76.0 MPa	11000 psi	
	@Strain 15.0 %, Temperature 0.000 °C	@Strain 15.0 %, Temperature 32.0 °F	50 mm/min; ISO 527-2
Elongation at Break	40 %	40 %	50 mm/min; ISO 37
Modulus of Elasticity	1.00 GPa	145 ksi	DIN EN ISO 527
Charpy Impact Unnotched	13.0 J/cm ²	61.9 ft-lb/in ²	
	@Temperature -30.0 °C	@Temperature -22.0 °F	DIN ISO 179
	NB	NB	
	@Temperature 23.0 °C	@Temperature 73.4 °F	DIN ISO 179
Charpy Impact, Notched	2.00 J/cm ²	9.52 ft-lb/in ²	
	@Temperature -30.0 °C	@Temperature -22.0 °F	DIN ISO 179
	7.00 J/cm ²	33.3 ft-lb/in ²	
	@Temperature 23.0 °C	@Temperature 73.4 °F	DIN ISO 179

Thermal Properties	Metric	English	Comments
CTE, linear	20.0 µm/m-°C	11.1 µin/in-°F	
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	53752-A
Deflection Temperature at 0.46 MPa (66 psi)	120 °C	248 °F	DIN EN ISO 75-2/Be
Deflection Temperature at 1.8 MPa (264 psi)	90.0 °C	194 °F	DIN EN ISO 75-2/Ae
Vicat Softening Point	87.0 °C	189 °F	B/50; ISO 306

Thermal Properties	Metric	English	Comments
Processing Properties	Metric	English	Comments
Processing Temperature	225 - 245 °C	437 - 473 °F	
Mold Temperature	50.0 - 70.0 °C	122 - 158 °F	

Descriptive Properties	Value	Comments
Color	Natural	
Commercial Status	North America	
Primary Processing Technique	Injection molding	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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