

# RTP 1202-90A

Thermoplastic Polyurethane Elastomer (Polyester)

RTP Company

Message:

Warning: The status of this material is 'Commercial: Limited Issue'  
The data for this material has not been recently verified.  
Please contact RTP Company for current information prior to specifying this grade.  
Glass fiber reinforced polyurethane elastomers offer greater dimensional stability than the base resin. They offer outstanding impact strength and still remain their elastomeric characteristics.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 10% filler by weight		
Features	Low Temperature Flexibility		
	Impact resistance, high		
	Good wear resistance		
	Good chemical resistance		
RoHS Compliance	Contact manufacturer		
Appearance	Black		
	Natural color		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.30	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.10	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.40	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	90		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	607	MPa	ASTM D638
Tensile Strength (Yield)	22.1	MPa	ASTM D638
Tensile Elongation (Break)	10	%	ASTM D638
Flexural Modulus	448	MPa	ASTM D790
Flexural Strength (Yield)	21.0	MPa	ASTM D790
Compressive Strength	15.2	MPa	ASTM D695
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.18 mm)	690	J/m	ASTM D256
Unnotched Izod Impact (3.18 mm)	1400	J/m	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648

0.45 MPa, not annealed	116	°C	ASTM D648
1.8 MPa, not annealed	54.4	°C	ASTM D648
CLTE - Flow	9.0E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.36	W/m/K	ASTM C177
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Volume Resistivity	1.0E+11	ohms·cm	ASTM D257
Dielectric Strength	16	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	4.90		ASTM D150
Dissipation Factor (1 MHz)	0.018		ASTM D150
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (1.59 mm, Values per RTP Company testing.)	HB		UL 94
<b>Additional Information</b>			
Molding Shrinkage, Linear-Flow, ASTM D955, 6.35mm: 1mm/m.			
<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>	
Rear Temperature	182 - 210	°C	
Middle Temperature	182 - 210	°C	
Front Temperature	182 - 210	°C	
Mold Temperature	15.6 - 65.6	°C	
Injection Pressure	68.9 - 103	MPa	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

