Raschig Group 4552 Silicone

Category : Polymer , Thermoset , Filled/Reinforced Thermoset , Silicone , Silicone, Molded, Glass Fiber Filled

Material Notes:

Glass fiber reinforced silicone molding compound. Excellent thermal stability - up to +/- 300°C continuously, excellent electrical properties, good mechanical strength, very good dimensional stability. Processing: Compression and Injection. Applications: Very high heat resistant connectorsInformation provided by the Raschig Group

Order this product through the following link:
http://www.lookpolymers.com/polymer_Raschig-Group-4552-Silicone.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.90 - 2.00 g/cc	1.90 - 2.00 g/cc	ISO 1183
Apparent Bulk Density	0.950 - 1.05 g/cc	0.0343 - 0.0379 lb/in³	ISO 60
Water Absorption	<= 0.10 % @Temperature 23.0 °C, Time 86400 sec	<= 0.10 % @Temperature 73.4 °F, Time 24.0 hour	ISO 62
Linear Mold Shrinkage	0.0020 - 0.0060 cm/cm	0.0020 - 0.0060 in/in	Injection and Compression; ISO 2257

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	30.0 - 40.0 MPa	4350 - 5800 psi	Injection and Compression; ISO 527
Modulus of Elasticity	5.00 - 6.00 GPa	725 - 870 ksi	Injection; ISO 527
	12.0 - 14.0 GPa	1740 - 2030 ksi	Compression; ISO 527
Flexural Strength	60.0 - 70.0 MPa	8700 - 10200 psi	Compression; ISO 178
	60.0 - 80.0 MPa	8700 - 11600 psi	Injection; ISO 178
Flexural Modulus	8.00 - 10.0 GPa	1160 - 1450 ksi	Injection; ISO 178
	8.00 - 11.0 GPa	1160 - 1600 ksi	Compression; ISO 178
Compressive Strength	70.0 - 90.0 MPa	10200 - 13100 psi	ISO 604
Charpy Impact Unnotched	0.400 - 0.600 J/cm² @Temperature 23.0 °C	1.90 - 2.86 ft-lb/in² @Temperature 73.4 °F	Injection and Compression; ISO 179/ 1eU
Charpy Impact, Notched	0.150 - 0.250 J/cm² @Temperature 23.0 °C	0.714 - 1.19 ft-lb/in² @Temperature 73.4 °F	Injection; ISO 179/ 1eA
	0.200 - 0.300 J/cm² @Temperature 23.0 °C	0.952 - 1.43 ft-lb/in² @Temperature 73.4 °F	Compression; ISO 179/ 1eA

Thermal Properties	Metric	English	Comments
CTE, linear	20.0 - 40.0 µm/m-°C @Temperature 50.0 - 150 °C	11.1 - 22.2 µin/in-°F @Temperature 122 - 302 °F	ISO 11359-2
Thermal Conductivity	0.400 - 0.600 W/m-K	2.78 - 4.16 BTU-in/hr-ft²-°F	ASTM E1461
Deflection Temperature at 1.8 MPa (264 psi)	>= 200 °C	>= 392 °F	ISO 75-A
Deflection Temperature at 8.0 MPa	>= 200 °C	>= 392 °F	ISO 75-C
Flammability, UL94	V-0 @Thickness 0.600 mm	V-0 @Thickness 0.0236 in	
Shrinkage	<= 0.050 % @Temperature 110 °C, Time 605000 sec	<= 0.050 % @Temperature 230 °F, Time 168 hour	Post shrinkage; ISO 2577

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 - 1.00e+16 ohm-cm	1.00e+15 - 1.00e+16 ohm-cm	IEC 60093
Surface Resistance	1.00e+14 - 1.00e+15 ohm	1.00e+14 - 1.00e+15 ohm	IEC 60093
Dielectric Constant	4.0 - 6.0 @Frequency 100 Hz	4.0 - 6.0 @Frequency 100 Hz	IEC 60250
	4.0 - 6.0 @Frequency 1.00e+6 Hz	4.0 - 6.0 @Frequency 1.00e+6 Hz	IEC 60250
Dielectric Strength	20.0 - 30.0 kV/mm	508 - 762 kV/in	IEC 60243-1
Dissipation Factor	0.010 - 0.020 @Frequency 100 Hz	0.010 - 0.020 @Frequency 100 Hz	IEC 60250
	0.020 - 0.040 @Frequency 1.00e+6 Hz	0.020 - 0.040 @Frequency 1.00e+6 Hz	IEC 60250
Comparative Tracking Index	>= 300 V	>= 300 V	CTI; IEC 60112

Processing Properties	Metric	English	Comments
Shelf Life	6.00 Month	6.00 Month	

Processing Properties	Metric	English	Comments
	@Temperature 15.0 - 25.0 °C	@Temperature 59.0 - 77.0 °F	

Descriptive Properties	Value	Comments
Arc Resistance	4 Stufe	ASTM D495
Water Absorption	<10 mg	ISO 62; 24h / 23°C

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