

Arlon R37806X030 Silicone Rubber/Fiberglass

Category : Polymer , Thermoset , Rubber or Thermoset Elastomer (TSE) , Silicone , Silicone Rubber , Silicone, Molded, Glass Fiber Filled

Material Notes:

Interleave: 3 mil PE; Side 2: uncured silicone rubber; Substrate: 162 fiberglass; Side 1: cured silicone rubber

Order this product through the following link:

http://www.lookpolymers.com/polymer_Arlon-R37806X030-Silicone-RubberFiberglass.php

Physical Properties	Metric	English	Comments
Specific Gravity	2.80 g/cc	2.80 g/cc	silicone property; Arlon SQA-TMS-024
Thickness	76.2 microns	3.00 mil	side 1; Arlon SQA-TMS-003
	229 microns	9.00 mil	side 2; Arlon SQA-TMS-003
	457 microns	18.0 mil	substrate; Arlon SQA-TMS-003
	762 microns	30.0 mil	overall; Arlon SQA-TMS-003

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	77	77	silicone property; ASTM D2240
Tensile Strength, Ultimate	4.72 MPa	685 psi	silicone property; ASTM D412
Elongation at Break	125 %	125 %	silicone property; ASTM D412
Modulus of Elasticity	0.0245 GPa	3.55 ksi	Arlon SQA-TMS-008
Poissons Ratio	0.50	0.50	
Adhesive Bond Strength	0.0241 MPa	3.50 psi	Arlon SQA-TMS-011

Thermal Properties	Metric	English	Comments
CTE, linear	111 $\mu\text{m/m-}^{\circ}\text{C}$ @Temperature 20.0 $^{\circ}\text{C}$	61.7 $\mu\text{in/in-}^{\circ}\text{F}$ @Temperature 68.0 $^{\circ}\text{F}$	silicone property; ASTM E 831
Specific Heat Capacity	0.820 J/g- $^{\circ}\text{C}$ @Temperature 100 $^{\circ}\text{C}$	0.196 BTU/lb- $^{\circ}\text{F}$ @Temperature 212 $^{\circ}\text{F}$	silicone property; Arlon SQA-TMS-052
Thermal Conductivity	1.40 W/m-K	9.72 BTU-in/hr-ft 2 - $^{\circ}\text{F}$	silicone property; ASTM E1530
	1.54 W/m-K @Temperature 100 $^{\circ}\text{C}$	10.7 BTU-in/hr-ft 2 - $^{\circ}\text{F}$ @Temperature 212 $^{\circ}\text{F}$	overall; Arlon SQA-TMS-054
Maximum Service Temperature, Air	200 $^{\circ}\text{C}$	392 $^{\circ}\text{F}$	

Minimum Service Temperature, Air Thermal Properties	-100 °C Metric	-148 °F English	Comments
Glass Transition Temp, Tg	-118 °C	-180 °F	silicone property; ASTM D3418
Flammability, UL94	V-0	V-0	

Electrical Properties	Metric	English	Comments
Dielectric Constant	6.91	6.91	silicone property; IPC TM 650-2.5.5.3
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	17.7 kV/mm	450 kV/in	ASTM D149
Dissipation Factor	0.0044	0.0044	silicone property; IPC TM 650-2.5.5.3
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Processing Properties	Metric	English	Comments
Cure Time	15.0 min	0.250 hour	
	@Temperature 121 °C	@Temperature 250 °F	
	120 min	2.00 hour	
	@Temperature 200 °C	@Temperature 392 °F	
Shelf Life	6.00 Month	6.00 Month	
	@Temperature 7.22 °C	@Temperature 45.0 °F	

Descriptive Properties	Value	Comments
Color	Gray	
Plasticity (mm) Arlon SQA-TMS-005	silicone property	

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