

Liquid Silicone Rubber Technical Data

		Test Method	HT-6135	HT-6210	HT-6220	HT-6240	
Typical Physical Properties	Durometer, Shore "A" (pts)	ASTM D-2240	35	10	20	40	
	Tensile Strength, psi (MPa)	ASTM D-412	800 (5.5)	250 (1.7)	800 (5.5)	800 (5.5)	
	Elongation, %	ASTM D-412	450	500	650	250	
	Tear Strength, pli (kN/m)	ASTM D-624	70 (12.3)	25 (4.4)	55 (9.6)	75 (13.1)	
	Compression Set, % 70 hr @ 302°F (150°C)	ASTM D-395(B)	30	35	35	35	
Effects of Dry Heat Aging	70 hr. @ 437°F (225°C)	Change in Hardness, Shore "A" (pts)	ASTM D-573	±5	±5	±5	±5
		Change in Tensile Strength, %	ASTM D-573	-15	-15	-15	-15
		Change in Elongation, %	ASTM D-573	-30	-40	-40	-40
Effects of Oil Immersion	70 hr. @ 302°F (150°C)	Change in Hardness, Shore "A" (pts)	ASTM D-471	±5	±5	±5	±5
		Change in Tensile Strength, %	ASTM D-471	-20	-35	-35	-35
		Change in Elongation, %	ASTM D-471	-20	-40	-40	-40
		Change in Volume, %	ASTM D-471	+15	+10	+10	+10
Electrical & Thermal Properties	Dielectric Constant	ASTM D-150	3.0	3.0	3.0	3.0	
	Dielectric Strength, Volts/mil	ASTM D-149	500	400	400	400	
	Volume Resistivity, Ohm - cm	ASTM D-257	10 ¹⁴	10 ¹⁴	10 ¹⁴	10 ¹⁴	
	Thermal Conductivity, BTU in/hr/ft ² /°F (W/m °K)	ASTM C-518	1.5 (0.21)	1.5 (0.21)	1.5 (0.21)	1.5 (0.21)	
Environmental Resistance	Volume Change from Water Immersion %, 70 hr. @ 212°F (100°C)	ASTM D-471	+5	+5	+5	+5	
	Low Temperature Embrittlement, °F (°C)	ASTM D-2137	-80 (-62)	-80 (-62)	-80 (-62)	-80 (-62)	
	Intermittent Upper Temperature Limit, °F (°C)	Rogers Internal	500 (260)	500 (260)	500 (260)	500 (260)	
	Recommended Use Temperature, °F (°C)	SAE J-2236	-80 to 425 (-62 to 218)	-80 to 425 (-62 to 218)	-80 to 425 (-62 to 218)	-80 to 425 (-62 to 218)	
Dimensions	Available Thickness Range, inches (mm)		0.010 to 0.125 (0.3 to 3.2)	0.010 to 0.032 (0.3 to 0.8)	0.010 to 0.063 (0.3 to 1.6)	0.010 to 0.125 (0.3 to 3.2)	
	Standard Widths, inches (mm)		36 (914)	36 (914)	36 (914)	36 (914)	
	Standard Colors		Cream	Gray	Black	Transparent	

The information contained in this technical data sheet is not intended to, and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose. Results may vary under specific conditions of use, and the customer should determine the suitability of BISCO™ Silicones for each application.