



BISCO® Silicones



Typical Product Properties

## BISCO® HT-800 Medium Cellular Silicone

PROPERTY	TEST METHOD	VALUE
<b>PHYSICAL</b>		
Density, lb. / ft <sup>3</sup> (kg / m <sup>3</sup> )	ASTM D 3574	20 (320)
Thickness, inches (mm)	---	1/32 to 1/2 (0.8 to 12.7)
Tolerance		See reverse
Standard Widths, inches (mm)		36 (914)
Standard Colors		Black, Gray, Red*
Compression Force Deflection, psi (KPa)	Force Measured @ 25% Deflection ASTM D 1056	6-14 (41-97)
Compression Set, % max.	ASTM D 1056 Test D @ 158°F (70°C)	<1
	ASTM D 1056 Test D @ 212°F (100°C)	<5
Tensile Strength, Min. psi (kPa),	ASTM D 412	45 (310)
Tensile Elongation, % min.,	ASTM D 412	80
<b>Environmental Properties</b>		
Water Absorption	ASTM D 471	1.40 %
UV Resistance	SAE J - 1960	No Degradation
Ozone Effect Rating	ASTM D 1171	0 (No Cracks)
Stain Resistance	ASTM D 925(A)	No Staining
Corrosion Resistance	AMS - 3568	Pass
<b>Flammability &amp; Outgassing</b>		
Flame Resistance	UL 94	Listed HF-1 & V-0
Flame Spread Index	ASTM E 162	<25
Limiting Oxygen Index	ASTM D 2863	40%
Smoke Density	ASTM E 662 Tested @ 4.0 minutes	<50
	Tested @ 1.5 minutes	<20
Toxic Gas Emissions Rating	SMP – 800-C & BSS 7239	Pass
Weight Loss	ASTM D 573 After 168 Hours @ 275°F (135°C)	0.90%

Please see reverse side for additional data.

The world runs better with Rogers.

HT-800 Medium Cellular Silicone (Continued)

PROPERTY	TEST METHOD	VALUE
<b>Electrical &amp; Thermal Properties</b>		
Dielectric Constant	ASTM D 149	1.42
Dielectric Strength	ASTM D 150, Volts/mil	91
Dry Arc Resistance	ASTM D 495, Seconds	92
Volume Resistivity, Ohm – cm	ASTM D 257	10 <sup>14</sup>
Thermal Conductivity, BTU in/hr/ft <sup>2</sup> /°F (w/m °K)	ASTM C 518	0.63 (0.09)
<b>Temperature Resistance</b>		
Hot Flex	ASTM D 573 Tested @ 446°F (230°C)	Pass
Low Temperature Embrittlement	ASTM D 746 (B) Tested @ -67 °F (-55°C)	Pass
Recommended Use Temperature, °F (°C)	SAE J-2236	-67- 392 (-55 – 200)
Recommended Intermittent High Temperature Use, °F (°C)	Internal	482 (250)

Standard Thickness Tolerance

Standard Thickness			Tolerance (Inches)
Inches		mm	
1/32	0.031	0.80	+/- 0.015
1/16	0.062	1.57	+/- 0.020
3/32	0.094	2.39	+/- 0.020
1/8	0.125	3.18	+/- 0.025
3/16	0.188	4.76	+/- 0.025
1/4	0.250	6.35	+/- 0.030
3/8	0.375	9.53	+/- 0.045
1/2	0.500	12.70	+/- 0.050

Width Tolerance (Cellular)

Nominal Width (Inches)	Tolerance without PSA	Tolerance with PSA
0 < T ≤ 3	+/- 0.063	+/- 0.031
3 < T ≤ 8	+/- 0.094	+/- 0.031
8 < T ≤ 12	+/- 0.125	+/- 0.031
12 < T ≤ 18	+/- 0.188	+/- 0.031
18 < T ≤ 26	+/- 0.219	+/- 0.063
26 < T ≤ 36	+/- 0.250	+/- 0.063

Notes:

1. All metric conversions are approximate.
2. Additional technical information is available.
3. Red color not available as standard for 1/32" (0.8 mm)

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