ROGERS CORPORATION

BISCO® Silicones

High Performance Foams Division

www.rogerscorp.com

Typical Product Properties

BISCO® HT-800 – MEDIUM CELLULAR SILICONE

HT-800 is a highly versatile, medium firmness silicone that offers the lightness of a foam, with the enhanced sealing capabilities of a traditional sponge rubber. It is used to seal and protect various outdoor communication, electronics, and lighting enclosures, while providing protection against wind driven rain and fire. The material is also used to reduce shock or isolate vibration. BISCO® Silicones are available in various thicknesses and manufactured in roll form to allow fabricators to easily convert the material to the proper dimensions.

Features and Benefits

- Excellent memory and low stress relaxation reduces maintenance costs associated with gasket failures due to compression set and softening.
- Resistance to ultraviolet light, ozone, extreme temperatures, and flame enables consistent performance in all environments.
- Compact cell structure and unique formulation provides enhanced sealing performance to resist penetration of fine particles and wind-driven rain.
- Available through distribution sites throughout North America, Europe, and Asia.

Applications

- Environmental seals to protect against penetration of dust, moisture, air, or light within outdoor enclosures such as lighting fixtures, HVAC units, and electronic cabinets
- Vibration isolators in electronic components and transportation vehicles
- Shock absorbing cushions and gaskets

Installation

- Available with a pressure-sensitive adhesive on one or two sides to allow easy application to a variety of surfaces.

BISCO® HT-800		
Property	**Test Method**	**Typical Value**
PHYSICAL		
Color		Black, Gray & Red*
Thickness, inches (mm) **Tolerance**		1/32 – 1/2 (0.80 – 12.70) See Reverse
Standard Width, inches (mm)		36 (914)
Density, lb./ft³ (kg/m³)	ASTM D 1056	22 (352)
Compression Force Deflection, psi (kPa)	Force measured @ 25% Deflection ASTM D 1056	9.0 (62.0)
Compression Set, % max.	ASTM D 1056 Test D @ 158°F (70°C) ASTM D 1056 Test D @ 212°F (100°C)	< 1 < 5
Tensile Strength, psi (kPa)	ASTM D 412	45 (310)
Elongation, %	ASTM D 412	80
FLAMMABILITY & OUTGASSING		
Flame Resistance	UL 94	Listed V-0 and HF-1
Flame Spread Index (L_s)	ASTM E 162	< 25
Smoke Density (D_s)	ASTM E 662 Tested @ 4.0 minutes Tested @ 1.5 minutes	 < 50 < 20
Toxic Gas Emissions Rating	SMP-800C	Pass

* Red color not available as standard for 1/32" (0.80mm)

BISCO® HT-800 – MEDIUM CELLULAR SILICONE (continued)

PROPERTY	TEST METHOD	VALUE
Environmental Properties		
Water Absorption	Internal: 24 hrs @ room temp.	1.40 %
Meets Ingredients Requirements section C of FDA CFR 177.2600 For Food Contact		HT-800 Gray & Black
Electrical & Thermal Properties		
Dielectric Constant	ASTM D 150	1.42
Dielectric Strength	ASTM D 149, Volts/mil	91
Dry Arc Resistance	ASTM D 495, Seconds	92
Volume Resistivity, Ohm - cm	ASTM D 257	10^{14}
Thermal Conductivity, BTU in/hr/ft² /°F (w/m °K)	ASTM C 518	0.63 (0.09)
Temperature Resistance		
Low Temperature Flex at -67°F (-55°C)	ASTM D 1056	Pass
Recommended Use Temperature, °F (°C)	SAE J-2236	-67 to 392 (-55 to 200)
Recommended Intermittent High Temperature Use, °F (°C)	Internal	482 (250)

Standard Thickness Tolerance

Standard Thickness			Tolerance (Inches)
Inches		mm	
1/32	0.031	0.8	± 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 (w/o PSA)	Tolerance (with PSA)
$0 < T \leq 3$	± 0.063	± 0.031
$3 < T \leq 8$	± 0.094	± 0.031
$8 < T \leq 12$	± 0.125	± 0.031
$12 < T \leq 18$	± 0.188	± 0.031
$18 < T \leq 26$	± 0.219	± 0.063
$26 < T \leq 36$	± 0.250	± 0.063

Notes:

1. All metric conversions are approximate.
2. Additional technical information is available.
3. Typical values are a representation of an average value for the population of the property. For specification values contact Rogers Corporation.