

Information

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.
- FDA compliant in accordance with FDA Regulation 21 CFR 177.2600. ¥

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 isolation 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.

Physical

PROPERTY	TEST METHOD	TYPICAL VALUE
Colour		Black, Grey & Red*
Thickness mm (inches) Tolerance		0.80 – 12.70 (1/32 – 1/2) See below
Standard Width mm (inches)		914 (36)
Density, kg/m ³ (lb./ft ³)	ASTM D 1056	352 (22)
Compression Force Deflection, kPa (psi)	Force measured @ 25% Deflection ASTM D 1056	62.0 (9.0)
Compression Set, % max.	ASTM D 1056 Test D @ 70°C (158°F) ASTM D 1056 Test D @ 100°C (212°F)	< 1 < 5
Tensile Strength, kPa (psi)	ASTM D 412	310 (45)
Elongation, %	ASTM D 412	80

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

Flammability & Outgassing

PROPERTY	TEST METHOD	TYPICAL VALUE
Flame Resistance	UL94	Listed V-0 and HF-1
Flame Spread Index (Ls)	ASTM E 162	< 25
Smoke Density (Ds)	ASTM E 662 Tested @ 4.0 minutes Tested @ 1.5 minutes	< 50 < 20
Toxic Gas Emissions Rating	SMP-800C	Pass

Environmental Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Water Absorption	Internal: 24hrs @ room temp	1.40%

Electrical & Thermal Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Dielectric Constant	ASTM D 150	1.42
Dielectric Strength	ASTM D 149, kV/m (Volts/mil)	3583 (91)
Dry Arc Resistance	ASTM D 495, Seconds	92
Volume Resistivity, Ohm-cm (ohm-in)	ASTM D 257	10 ¹⁴ (3.94 x 10 ¹³)
Thermal Conductivity, w/m °K (BTU in/hr/ft ² /°F)	ASTM C 518	0.09 (0.63)

Temperature Resistance

PROPERTY	TEST METHOD	TYPICAL VALUE
Low Temperature Flex at -55°C (-67°F)	ASTM D 1056	Pass
Recommended Use Temperature, °C (°F)	Internal	-55° to 200° (-67° to 392°)

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

The information contained in this Data Sheet is intended to assist you in designing with BISCO Foams. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown on the Data Sheet will be achieved by a user for a particular purpose. The user should determine the suitability of BISCO Foams for each application.

Notes

- All metric conversions are approximate.
- Additional technical information is available.
- Typical values should not be used for specification limits.

¥ Statement of FDA compliance is based solely on the following: HT-800 (Grey) silicone foams (i) are compounded and cured under conditions of good manufacturing practice; and (ii) have been subjected to annual extraction testing in accordance with FDA Regulation 21 CFR 177.2600 paragraphs (e) and (f) and found to meet all extractives limitations; both of which are criteria set forth in 21 CFR 177.2600 as necessary for rubber articles intended for repeated use in those areas specified in the regulation.

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