

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.

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 inches (mm) Tolerance		1/32 - 1/2 (0.80 - 12.70) see below
Standard width inches (mm)		36 (914)
Density, lb.ft ³ (kg/m ³)	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), 22hrs ASTM D 1056 Test D @ 212°F (100°C), 22hrs	< 1 < 5
Tensile strength, psi (kPa)	ASTM D 412	45 (310)
Elongation %	ASTM D 412	80

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

Flammability & Outgassing

PROPERTY	TEST METHOD	TYPICAL VALUE
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

Environmental Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Water absorption	Internal: 24hrs @ room temp	1.40 %
Meets ingredients requirements section C of FDA CFR 177.2600 for Food Contact		HT-800 Grey & Black

Electrical & Thermal Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
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/ft ² /°F (w/m °K)	ASTM C 518	0.63 (0.09)

Temperature Resistance

PROPERTY	TEST METHOD	TYPICAL VALUE
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 use intermittent high temperature use °F (°C)	Internal	482 (250)

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 and data contained herein is believed to be accurate and reliable. However it is the user's responsibility to determine suitability for use. C B Frost & Co makes no warranties concerning fitness or suitability of its products for a particular use or purpose. C B Frost & Co reserve the right to alter the material specification at any time, without prior notice.

Notes

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

t +44 (0) 121 773 8494
f +44 (0) 121 772 3584
w www.cb frost-rubber.com
e info@cb frost-rubber.com
t twitter.com/cbfrost

