



## DHT-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.

### 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 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.

DHT-800		
Property	Test Method	Typical Value
<b>PHYSICAL</b>		
<b>Color</b>		Black, Gray & Red*
<b>Thickness</b> , inches (mm) <b>Tolerance</b>		1/32 – 1/2 (0.80 – 12.70) See Reverse
<b>Standard Width</b> , inches (mm)		36 (914)
<b>Density</b> , lb./ft <sup>3</sup> (kg/m <sup>3</sup> )	ASTM D 1056	22 (352)
<b>Compression Force Deflection</b> , psi (kPa)	Force measured @ 25% Deflection ASTM D 1056	9.0 (62.0)
<b>Compression Set</b> , % max.	ASTM D 1056 Test D @ 158°F (70°C)	< 1
	ASTM D 1056 Test D @ 212°F (100°C)	< 5
<b>Tensile Strength</b> , psi (kPa)	ASTM D 412	45 (310)
<b>Elongation</b> , %	ASTM D 412	80
<b>FLAMMABILITY &amp; OUTGASSING</b>		
<b>Flame Resistance</b>	UL 94	Listed V-0 and HF-1
<b>Flame Spread Index (L<sub>s</sub>)</b>	ASTM E 162	< 25
<b>Smoke Density (D<sub>s</sub>)</b>	ASTM E 662 Tested @ 4.0 minutes	< 50
	Tested @ 1.5 minutes	< 20
<b>Toxic Gas Emissions Rating</b>	SMP-800C	Pass

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

The information contained in this Data Sheet is intended to assist you in designing with Delta Rubber High Performance 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 Delta Rubbers High Performance Foams for each application.

## DHT-800 – MEDIUM CELLULAR SILICONE (continued)

PROPERTY	TEST METHOD	VALUE
<b>Environmental Properties</b>		
Water Absorption	Internal: 24 hrs @ room temp.	1.40 %
<b>Electrical &amp; Thermal Properties</b>		
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 <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>		
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 ≤ 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. Typical values are a representation of an average value for the population of the property. For specification values contact Rogers Corporation.

‡ Statement of FDA compliance is based solely on the following, HT-800 (Gray) 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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