



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 |
| 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./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) | < 1 |
| | ASTM D 1056 Test D @ 212°F (100°C) | < 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 | < 50 |
| | Tested @ 1.5 minutes | < 20 |
| Toxic Gas Emissions Rating | 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 |
|---|-------------------------------|-----------------------------|
| Environmental Properties | | |
| Water Absorption | Internal: 24 hrs @ room temp. | 1.40 % |
| 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/ft ² /°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 ≤ 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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