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Material Specification Sheet

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BF1000 Silicone Sponge

General Description

Compressibility, softness and durability allow BF1000 to adapt to various environments making it an ideal choice for sealing outdoor enclosures, protecting electronics from shock and heat, and providing cushioning or vibration isolation for various applications. BF1000 is available in various thicknesses and manufactured in roll format to allow fabricators to easily convert the material to the required dimensions

Feature and Benefits

Excellent memory and low stress relaxation reduce maintenance costs associated with gasket failures due to compression set and softening. Resistance to UV, 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.

Property	Test Method	Typical Value
Density Lb/ft3 (Kg/m3)	ASTM D1056	22 (352)
Compression force deflection psi (kPa)	Force measured at 25% deflection ASTM D1056	9 (62)
Compression set % max	ASTM D1056 test D @ 158°F (70 °C), 22 hours	<1
Compression set % max	ASTM D1056 test D @ 212°F (100 °F), 22 hours	<5
Tensile strength, psi (kPa)	ASTM D412	45 (310)
Elongation %	ASTM D412	80
Flammability & Outgassing		
Flame resistance	UL94	Listed V-0 and HF-1
Flame speed index (L?)	ASTM E162	<25
Smoke density (Ds)	ASTM E662 tested @ 4.0 mins	<50
Smoke density (Ds)	ASTM E662 tested @ 1.5 mins	<20
Toxic gas emissions	SMP-800C	Pass
Environmental Properties		
Water absorption	Internal – 24 hours @ room temp	1.40%
UV resistance	SAE J1960	No Degradation
Ozone effect rating	ASTM D1171	0 (no cracks)
Corrosion resistance	AMS-3568	Pass
Meets requirements of FDA CFR 177.2600 for food contact		Yes - grey and black only
Electric & Thermal Properties		
Dielectric constant	ASTM D150	1.42
Dielectric Strength	ASTM D149, Volts/Mil	91
Dry arc resistance	ASTM D495, seconds	92
Volume resistivity, Ohm-cm	ASTM D257	10 ¹⁴
Thermal conductivity, BTU in/hr/ft2/ ° f (w/m ° k)	ASTM C518	0.63 (0.09)
Low temp flex at 67 °F (-55 °C)	ASTM d1056	Pass
Recommended use temp °F (°C)	SAE J-2236	-67 to 392 (-55 to 200)
Recommended intermittent high temp use °F (°C)	Internal	482 (250)

The information given above is based upon average values and is no way intended as a warranty. The purchaser is deemed responsible for determining the suitability of the product for any application. All data relating to suitable uses and description information concerning our products are compiled from research and are believed to be reliable but are provided for guidance purposes only. The Company holds no legal or contractual responsibility for information supplied

