

AUBURN PRODUCT NEWS

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NEW BF-1000 – EXTRA SOFT CELLULAR SILICONE

Compressibility, softness and durability allow BF-1000 to adapt to a variety of 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. BF-1000 is available in various thicknesses and is manufactured in roll or sheet forms. BF-1000 can be further die cut into gaskets, seals, cushions and pads to the proper dimensions, and slit to rolls of specific width and laminated on one or two of its surfaces with silicone or acrylic PSA.

Features and Benefits

- Softness allows designers to use less force to seal enclosures and still protect their devices from the environment.
- High compressibility allows material to conform to variable width gaps and awkward shapes, thereby allowing engineers more design flexibility.
- 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.
- Available with adhesive backings of silicone type or acrylic type.

Applications

- Vibration insulation in electronic components and transportation vehicles.
 - Low closure force gaskets within portable electronics such as laptops and LCD screens within aircraft and rail interiors.
- Fire retardant thermal insulation.

Installation

Available with a pressure-sensitive on one or two sides to allow easy application to a variety of surfaces.

Typical Product Data Sheet

PROPERTY		TEST METHOD	TYPICAL VALUE
PHYSICAL			
Color			Gray & White
Thickness:	inches mm Tolerance		0.063 -1.000 (1.60-25.40) See Reverse
Standard Width, inches (mm)			36 (914)
Density, lb/ft ³ (kg/m ³)		ASTM D 1056	13.0 (208)
Compression Force Deflection, psi (kPa)		Force measured @ 25% Deflection ASTM D 1056	3 (20.7)
Compression Set, Typical, % max		ASTM D 1056 Test D @ 158° F (70°C). 22 hrs ASTM D 1056 Test D @ 212° F (100°C). 22 hrs	< 1 < 5
Tensile Strength, psi (kPa)		ASTM D 412	35 (241)
Elongation, %		ASTM D 412	90
FLAMMABILITY & OUTGASSING			
Flame Resistance		UL 94	Listed V-0 and HF-1
Flame Spread Index (I_s)		ASTM E 162	< 35
Smoke Density (D_s)		ASTM E 662 Tested @ 4.0 minutes Tested @ 1.5 minutes	< 50 < 20
Toxic Gas Emissions Rating		SMP-800C & BSS 7239	Pass

Note: The technical information and data provided here should be considered representative or typical only and should not be used for specification purposes. User should evaluate this product to determine whether it is fit for a particular purpose and suitable for user's method of application.

BF-1000 – EXTRA SOFT CELLULAR SILICONE (continued)

PROPERTY	TEST METHOD	VALUE
ENVIRONMENTAL PROPERTIES		
Water Absorption	Internal: 24 hrs @ room temp.	3.50 %
UV Resistance	SAE J -1960	No Degradation
Ozone Effect Rating	ASTM D 1171	0 (No Cracks)
Corrosion Resistance	AMS – 3568	Pass
Other Specifications Available	BMS 1-68	
ELECTRICAL & THERMAL PROPERTIES		
Dielectric Constant	ASTM D 150	1.34
Dielectric Strength	ASTM D 149, Volts/mil	89
Dry Arc Resistance	ASTM D 495, Seconds	90
Volume Resistivity, Ohm-cm	ASTM D 257	1014
Thermal Conductivity BTU in/hr/ft ² /°F (w/m °K)	ASTM C 518	0.39 (0.06)
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		
1/16	0.063	1.60	± 0.016
3/32	0.094	2.39	± 0.020
1/8	0.125	3.18	± 0.025
3/16	0.188	4.76	± 0.030
1/4	0.250	6.35	± 0.040
3/8	0.375	9.53	± 0.060
1/2	0.500	12.70	± 0.060
3/4	0.750	19.05	± 0.090
1	1.000	25.40	± 0.090

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. Samples are available with or w/out adhesive