

### Information

BISCO® BF-1000 is a highly compressible, soft silicone foam. The combination of low weight and softness makes it an ideal solution where low closure force and sealing are critical. Patented chemistry and cell structure provide long term performance advantage.

### Features & Benefits, applicable to all BISCO® Cellular Materials (Foams):

- Temperature independency
  - UV/ Ozone resistant
  - Rated to most stringent flame standards
- † It is FDA compliant in accordance with Regulation 21 CFR 177.2600

### Physical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE*	SPECIFICATION**
Colour	Visual	<b>White, Grey &amp; Black</b>	
Thickness mm (inches)	Internal	<b>1.59 – 25.40 (0.063 – 1.000)</b>	
Density, kg/m <sup>3</sup> (lb./ft <sup>3</sup> )	Internal	192 (12)	<b>156 - 287 (9.8 – 19.7)</b>
Compression Force Deflection, kPa (psi)	ASTM D1056	16.5 (2.4)	<b>7 - 35 (1 - 5)</b>
Compression Set, %	ASTM D1056 100°C (212°F) / 22 hrs / 50%	1.7	< 5
Tensile Strength, kPa (psi)	ASTM D412	262 (38)	> 140 (> 20)
Elongation, %	ASTM D412	86	> 60
Water Absorption, %	Internal 2" below water surface / 24 hrs / change in weight	1.4	< 10

Specification values in bold are tested on a batch basis.

Further industry specifications tested in tables below.

### Flammability Properties

PROPERTY	TEST METHOD	TYPICAL VALUE*	SPECIFICATION**
Flame Resistance	UL 94 (File E83967)	Meets	V-0; HF-1
Flame Spread Index (Is)	ASTM E162	Meets	Flaming Mode < 35
Smoke Density (Ds)	ASTM E662	Meets	Flaming Mode @ 1.5min, < 100 Flaming Mode @ 4.0min, < 200
Burn Length	FMVSS 302	Meets	< 100 mm/min

**Convertors and suppliers of die cut gaskets, tape, sheeting, fabrications, machined plastic components, rubber mouldings, extrusions and adhesives.**



**Thermal Properties**

PROPERTY	TEST METHOD	TYPICAL VALUE*	SPECIFICATION**
Temperature Range, °C (°F)	Internal	-55 to +200 (-67 to +392)	-
Thermal Conductivity, W/m °K	ASTM D518	0.048	-
Low Temperature Flex	ASTM D1056 -55°C (-67°F) / 5 hrs	Pass	-
Low Temperature Brittleness	ASTM D746 -55°C (-67°F) / 3 min	Pass	-

**Standard Thickness Tolerances**

NOMINAL THICKNESS	TOLERANCE
mm (inches)	mm (inches)
1.59 (0.063)	± 0.381 (± 0.015)
2.38 (0.094)	± 0.508 (± 0.020)
3.18 (0.125)	± 0.508 (± 0.020)
4.76 (0.188)	± 0.762 (± 0.030)
6.35 (0.250)	± 1.016 (± 0.040)
9.53 (0.375)	± 1.524 (± 0.060)
12.70 (0.500)	± 1.270 (± 0.050)
15.88 (0.625)	± 1.524 (± 0.060)
19.05 (0.750)	± 2.286 (± 0.090)
25.40 (1.000)	± 2.286 (± 0.090)

**Slit Material and Tape (PSA) Width Tolerances**

NOMINAL WIDTH	TOLERANCE
mm (inches)	mm (inches)
> 0 - 76 (> 0 - 3)	± 1.60 (± 0.063)
> 76 - 203 (> 3 - 8)	± 2.39 (± 0.094)
> 203 - 305 (> 8 - 12)	± 3.18 (± 0.125)
> 305 - 457 (> 12 - 18)	± 4.78 (± 0.188)
> 457 - 660 (> 18 - 26)	± 5.56 (± 0.219)
> 660 - 914 (> 26 - 36)	+ 25.4/- 0 (+ 1/- 0)

**Value Added Offerings**

- Adhesive (PSA) lamination
- Slit material/tapes

† Statement of FDA compliance is based solely on the following: BF-1000 (White) 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.

**Notes:**

- \*Typical value – Value is based on historical data. Please note the frequency of testing varies.
- \*\*Specification – Applies to physical properties only, which are based on Rogers' internal benchmark and standard BISCO specification values.

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 particular application. All data relating to suitable uses and descriptions 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.

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