

BISCO® BF-1000

BISCO® BF-1005

Boeing BMS 1-68

BISCO® BF-1000 and BF-1005 foams are highly compressible, soft silicone foam. The combination of low weight and softness makes them an ideal solution where low closure force and sealing are critical. The patented chemistry and cell structure provide a long term performance advantage.

This Product Data Sheet is for BMS 1-68 Grade A Forms 2 and 3 only. To receive this material, it must be stated on the Purchase Order at the time of ordering.

Features & Benefits

- Certified to BMS 1-68
- Grade A - Soft
- Form 2 - Sheet material without adhesive (BF-1000)
- Form 3 - Sheet material with pressure sensitive acrylic adhesive on one side (BF-1005)

PROPERTY	TEST METHOD	TYPICAL VALUE*	SPECIFICATION**
PHYSICAL			
Color	Visual	White (Natural), Gray, Light Gray, Pepperdust, Tan, Black, Brown	
Thickness, inches	Internal	0.063 - 1.000	---
Density, lb./ft ³	Internal	12	14max >0.095" 19 max <0.095"
Compression Force Deflection, psi	ASTM D1056	2.4	5 max
Compression Set, %	ASTM D1056 100°C (212°F) / 22 hrs / 50%	1.7	< 10
Water Absorption, %	BMS 1.68 - Section 8.5	1.4	< 10
Elongation, %	ASTM D412	90	> 60

Specification values in bold are tested on a batch basis.

Other tests listed are done on a periodic schedule determined by Boeing

PROPERTY	TEST METHOD	SPECIFICATION**
FLAMMABILITY		
Flame Resistance	BSS 7230 60 second vertical ignition	PASS
Extinguish Time, seconds, max		15.0
Burn Length, inches, max		6.0
Drip Ext. Time, seconds, max.		30

PROPERTY QUALIFICATION	TEST METHOD	TYPICAL VALUE*	SPECIFICATION**
Smoke and Toxic Gas Generation	BSS 7238 / BSS7239		PASS
Shear Creep Failure, hours, min	BMS 1-68 section 8.10 Form 3 only		5 min
Phosphate Ester Fluid Immersion Volume increase, percent, max. Type IV, Class 1, Grade A fluid	ASTM D471/BMS 3-11		20 Max.
Heat Aging	ASTM D573		PASS
Low Temperature Resistance	BSS 7232		PASS

Standard Thickness Tolerances

NOMINAL THICKNESS	TOLERANCE
mm (inches)	mm (inches)
1.59 (0.063)	± 0.508 (± 0.020)
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

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 Boeing specification values.