

BISCO® RF-120 Heat Shield Specialty Silicone Foam

BISCO® RF-120 specialty silicone composite is a reflective foam designed to aid in heat management by insulating against heat and reflecting it away. The material is comprised of a smooth, aluminized fabric and low-density BF-1000. It is commonly specified for commercial, professional, and military vehicles.

Features & Benefits:

- Effective heat shield by insulating against heat and reflecting it away
- Strength of an aluminized fabric
- Flexibility and softness of BF-1000 foam
- FMVSS302 flammability rated

PROPERTY	TEST METHOD	TYPICAL VALUE	SPECIFICATION
PHYSICAL			
Color	Visual	White	---
Thickness Available, mm (inches)		2.50, 5.00 (0.098, 0.197)	---
Areal Density, kg/m ² (lb./ft ²)	ASTM 146	0.83 (0.17) 1.17 (0.24)	0.25 max 0.35 max
CFD Force Measured at 25% Deflection, kPa (PSI)	ASTM D1056		---
*Tensile, kPa (PSI)	ASTM D412	138 (20)	---
*Elongation, % min	ASTM D412	60	---
Compression Set, % 22 hours, 100°C (212°F), 50% compression	ASTM D1056	41 (6)	16.5 (2.4) 0-35 (0-5)1.7
FLAMMABILITY			
Cohesive Failure	INTERNAL	PASS	---
Burn Length	FMVSS302	---	PASS

Values in bold are tested on a batch basis. Further industry specifications tested in tables below.

*Tensile, Elongation and Dielectric properties are tested with substrate.

PROPERTY	TEST METHOD	TYPICAL VALUE	SPECIFICATION
THERMAL			
Temperature Range, C° (F°)	INTERNAL	---	-55°to+200° (-67°to 392°)
Thermal Conductivity, W/m °K	ASTM D518	0.067	---
ELECTRICAL			
*Dielectric Strength, Volts/mil	ASTM D149	55	---
*Dielectric Constant (1 kHz)	ASTM D150	1.6	---
Dissipation Factor (1 kHz)	ASTM D150	0.0251	---
Dry Arc Resistance, Seconds	ASTM D495	99	---
Volume Resistivity, Ohm-cm	ASTM D257	10 ¹⁴	---

*Tensile, Elongation and Dielectric properties are tested with substrate.

*Notes:

- All metric conversions are approximate.
- Additional technical information is available.
- Values should not be used for specification limits.