PORON®

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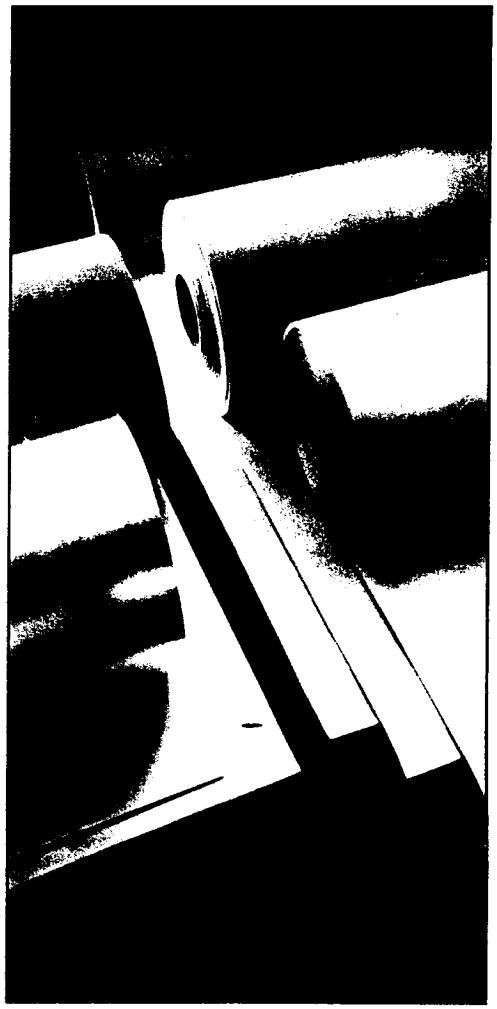
PORON® Silicones expand the parameters of possibility in product design engineering.

PORON® Cellular Silicones are ideal for use as gaskets and seals, cushions, and thermal and acoustic insulation in demanding conditions. Their resistance to environmental extremes, mechanical resilience and safety features make them perfectly suited for critical applications in transportation equipment, electrical enclosures, electronic products and components, industrial machinery and appliances.



PORON® Silicone Foam and Sponge Offer:

- A use temperature range that exceeds 204°C (400°F)
- Unsurpassed compression-set resistance
- Variable grades of closure force from very soft to very firm
- UL rated flame resistance, including 94V-0 and 94HF-1 listings
- Outstanding sealability as gaskets and seals
- Extremely low toxic gas emission when exposed to fire
- Excellent resistance to ozone and ultraviolet exposure
- FDA approved materials
- Open and closed cell options

This facility is registered to ISO 9002
Certificate No. A-5857

Pub. 180-005 Printed in U.S.A.
1172-128-5.0 F

Typical Physical Properties

PORON® Silicone Foam & Sponge Materials

PROPERTY	TEST METHOD
■ Physical Properties	
Compression Force Deflection, psi (kpa) @ 25% Deflection	ASTM D-1056
Compression Set @ 70°C (158°F)	ASTM D-1056
Compression Set @ 100°C (212°F)	ASTM D-1056
Density, lb/ft³ (kg/m³)	ASTM D-3574
Tensile Strength, psi (kpa)	ASTM D-412
Elongation, %	ASTM D-412
■ Environmental Properties	
Gasketing & Sealing Rating	UL 157
Water Absorption	ASTM D-471
UV Resistance	SAE J-1960
Ozone Effect Rating	ASTM D-1171
Stain Resistance	ASTM D-925(A)
Corrosion Resistance	AMS-3568
■ Flammability & Outgassing	
***Flame Resistance	UL 94
	UL 94
Flame Spread Index (I_s)	ASTM E-162
Limiting Oxygen Index (LOI)	ASTM D-2863
Smoke Density (D_x) @ 4.0 Minutes	ASTM E-662
Smoke Density (D_x) @ 1.5 Minutes	ASTM E-662
Toxic Gas Emissions Rating	SMP-801 & BSS
Weight Loss After 168 Hours @ 135°C (275°F)	ASTM D-573
■ Electrical & Thermal Properties	
Dielectric Constant	ASTM D-149
Dielectric Strength (Volts/mil)	ASTM D-150
Dry Arc Resistance (Seconds)	ASTM D-495
Volume Resistivity (Ohm - cm)	ASTM D-257
Thermal Conductivity (BTU in./hr/ft²/°F) (Wm/°K)	ASTM C-518
■ Temperature Resistance	
Hot Flex @ 230°C (446°F)	ASTM D-573
Low Temperature Embrittlement	ASTM D-746(B)
Recommended Use	SAE J-2236
Recommended Intermittent High Temperature Use	Rogers Internal
■ Dimensions	
Available Thickness Range	
Standard Widths	
Standard Colors	
■ Specifications Available	
FDA Approved	

* BF-1000 greater than 3/4" (19mm) thick is supplied in standard, 30" wide rolls ** BF-1000 is standard in Gray

***Underwriters limits fire ratings to specific colors, thickness and density. Consult available UL Yellow Cards for more detail.

›D	BF-1000	HT-800	HT-820	HT-840
›56	2(14)	8(55)	14(97)	18(124)
56	< 1%	< 1%	< 1%	< 1%
56	< 5%	< 5%	< 5%	< 5%
74	12 (192)	20 (320)	24 (384)	28 (449)
12	35 (241)	45 (310)	60 (414)	70 (483)
12	100	80	65	55
57	N/A	JMLU-2 (Listed)	N/A	N/A
71	3.5%	1.4%	0.8%	0.2%
60	No Degradation	No Degradation	No Degradation	No Degradation
71	0 (No Cracks)	0 (No Cracks)	0 (No Cracks)	0 (No Cracks)
A)	No Staining	No Staining	No Staining	No Staining
68	Pass	Pass	Pass	Pass
94	HF-1 (Listed)	HF-1 (Listed)	HF-1 (Listed)	HF-1 (Listed)
94	V-0 (Listed)	V-0 (Listed)	V-0 (Listed)	V-0 (Listed)
62	< 25	< 25	< 25	< 25
63	34%	40%	42%	44%
62	< 50	< 50	< 50	< 50
62	< 20	< 20	< 20	< 20
6S	Pass	Pass	Pass	Pass
73	1.2%	0.9%	0.8%	0.7%
49	1.34	1.42	1.50	1.58
50	89	91	93	95
95	90	92	96	98
57	10^{14}	10^{14}	10^{14}	10^{14}
18	0.39	0.63	0.75	0.84
	0.06	0.09	0.11	0.12
73	Pass	Pass	Pass	Pass
3)	-55°C (-67°F)	-55°C (-67°F)	-55°C (-67°F)	-55°C (-67°F)
66	-55°C to 200°C (-67°F to 392°F)	-55°C to 200°C (-67°F to 392°F)	-55°C to 200°C (-67°F to 392°F)	-55°C to 200°C (-67°F to 392°F)
al	250°C (482°F)	250°C (482°F)	250°C (482°F)	250°C (482°F)
	1/16" - 1" (1.6mm - 25.4mm) 36" (914mm)* White**	1/32" - 1/2" (0.8mm - 12.7mm) 36" (914mm) Red, Gray & Black	1/32" - 1/4" (0.8mm - 6.4mm) 36" (914mm) Gray	1/16" - 1/4" (1.6mm - 6.4mm) 36" (914mm) Gray
	BMS 1-68 White Color Only	AMS-3195 Gray Color Only	AMS-3196 Gray Color Only	N/A N/A

andard › Gray color in 1/16" (1.6mm), 1/8" (3.2mm), 1/4" (6.4mm) and 1/2" (12.7mm) thicknesses.

Available With Acrylic or Silicone Pressure Sensitive Adhesive. (See Back Cove

Properties and specifications listed apply to PORON® material prior to adhesive lamination only.

Pressure Sensitive Adhesive Options

ACRYLIC ADHESIVE

Nomenclature:

Base Material	Base Material w/Adhesive
BF-1000	BF-1005(A)
HT-800	HT-805(A)
HT-820	HT-825(A)
HT-840	HT-845(A)

	TYPICAL PROPERTIES	TEST METHOD
Construction	2.5 mil. acrylic/.5 mil. carrier	
Release Liner	70-80# Poly-Coated Kraft	
Peel Adhesion 20 min. Dwell	75 oz./in.	PSTC-1
Shear Adhesion 500 grams (1" x 1")	+120 hr.	PSTC-7
Shelf Life	6 months	
Temperature Range	-32 to 149°C (-25 to 300°F)	

SILICONE ADHESIVE

Nomenclature:

Base Material	Base Material w/Adhesive
BF-1000	BF-1005(S)
HT-800	HT-805(S)
HT-820	HT-825(S)
HT-840	HT-845(S)

	TYPICAL PROPERTIES	TEST METHOD
Construction	2 mil. unsupported silicone	
Release Liner	2 mil. polyester	
Peel Adhesion 20 min. Dwell	25 oz./in.	PSTC-1
Shear Adhesion 500 grams (1" x 1")	+ 24 hr.	PSTC-7
Shelf Life	3 months	
Temperature Range	-51 to 232°C (-60 to 450°F)	

NOTE: *Peel and shear adhesion data is for the adhesive only. Figures will vary with different substrate and substrate thicknesses.*