

FLAMMABILITY

Oxygen Index	ASTM-D-2863	37-40%	35-39%	49%
Specific Optical Smoke Density	ASTM-E-662			
Flaming (max)		3	5	
Smoldering (max)		2	3	
Radiant Panel Flame Spread Index	ASTM-E-162	2	1	
Vertical Burn	FAR 25,853(a), 60 seconds			
Flame Time		0 sec	0 sec	0 sec
Burn Length		0.4 in	1.0 in	1.0 in
Dripping		None	None	None
OSU Heat Release	FAR 25.853(c)/ASTN-E-906			
Total		7kW min/M ²	8kW min/M ²	14kW min/M ²
Peak Rate		10kW/M ²	13kW/M ²	
Peak Rate				4.84 min
Surface Burning	ASTM-E-84			
Flame Spread Index		5	10	
Smoke Index		<5	10	
FAA Smoke Density	FAR 25.853(c)			0.9

MECHANICAL

Density	ASTM-D-3574(A)	0.33 ±10% PCF	0.55 ±10% PCF	2 ±10% PCF
Tensile Strength	ASTM-D-3574(E)	2 PSI min	7.5 PSI min	46 PSI min
Ultimate Elongation	ASTM-D-3574(E)	10-20%	10-20%	8%
Compression Set @ 50% Deflection	ASTM-D-3574(D)	32.4-39.6%	37%	29%
Load Deflection @ 25% Compression	BMS 8-300	23 ±33% lbs/50 in ²	40 lbs/50 in ²	
Flexibility	BMS 8-300	Pass	Pass	
Friability, Weight Loss	ASTM-C-421	0.9%	0.8%	
Compression Force @ 50% Deflection				5.9 PSI

THERMAL

Thermal Stability, Weight Loss	TGA @ 204°C (400°F)	0.4	0.7	
Continuous Service Temperature:				
Loss in Tensile Strength	1000 hrs @ 260°C (500°F)	25%	60-70%	
Thermal Conductivity (k)	ASTM-C-518 @ 24°C (75°F)	0.34 ±10% BTU-in/hr/ft ³ -°F	0.30 ±10%	(ASTM-C-177) 0.22 ±10%
Thermal Resistivity (r)	ASTM-C-518 @ 24°C (75°F)	2.0 ±10% hr-ft ² -°F/BTU-in	3.3 ±10%	(ASTM-C-177) 4.4 ±10%
Steam Autoclave Aging:				
Loss in Tensile Strength	ASTM-D-3574(J ₁)	10%	12%	
Accelerated Aging:	BMS 8-300			
Load Deflection Change		-5%	-5%	
Compression Set Change		-5%	-0.5%	
Volume Shrinkage		-0.5%	-1.3%	
Vertical Burn				
Flame Time		0 sec	0 sec	
Burn Length		0.4 in	1.4 in	
Dripping		None	None	

OTHER

Toxicity-Draeger Tube	ATS-1000			
HCl				ND
HCN				ND
HF				ND
SO _x				ND
CO				2.0
NO/NO ₂				3
NH ₃				ND

Water Vapor Absorption	7 Days, 66°C (150°F), 90% RH	0.005 lbs/ft ³	0.008 lbs/ft ³	
Outgassing	ASTM-E-595			
TML		0.27%	0.386%	
CVCM		0.0%	0.009%	
Oil Resistance	MIL-P-15280	Pass	Pass	
LPS-3 Resistance	Immersion for 28 Days	No softening or visible swelling		
Water Repellency	BMS 8-48			
Initial Weight Gain		0.247 lbs	0.160 lbs	
@ 24 hours		0.0005 lbs	0.008 lbs	
@ 48 hours		0.0 lbs	0.0004 lbs	
Wicking	BMS 8-48 @ 75°F (24°C)	None	None	
Air Flow	ASTM-D-3574(G)			0.15 ft ³ /min