



Constantly seeking better ways to be the best®



## MilCore™

MilCore™ is an extremely lightweight and cost effective thermal insulation made from a NBR/PVC closed cell foam and a black spunbond fabric facing. The fabric is a durable non-marring and non-perforated material that is UV stable and does not absorb liquid or allow bacterial growth. The elastomeric foam improves equipment performance through lasting protection against water intrusion, heat gain or loss and condensation formation. Together these two materials form a composite that can be used in tough environments while still being easy to install and having the ability to conform to various applications. MilCore™ meets the flammability requirements of FMVSS-302. It is available with or without a pressure sensitive adhesive.

### TYPICAL APPLICATIONS:

- Cab Insulation
- Protective Padding
- Sport & Leisure



## Typical Physical Properties: Closed Cell Foam

Specification	Test Method	Typical Results
Main Composition	ASTM D1056-00 2B1 (C1, F1, M)	NBR/PVC
Density	ASTM D1667	3-6 lbs/ft <sup>3</sup>
Thermal Conductivity <i>75°F mean temp</i> <i>90°F mean temp</i> <i>32°F mean temp</i>	ASTM C177	0.26 BTU-in/hr-ft <sup>2</sup> -°F 0.25 BTU-in/hr-ft <sup>2</sup> -°F 0.24 BTU-in/hr-ft <sup>2</sup> -°F
Compression Resistance <i>25%</i> <i>50%</i>	ASTM D1056	2-4 psi 7-9 psi
Compression Set, 50%	ASTM D1056	30% max
Tensile Strength	ASTM D412, Die A	30 psi min
Elongation	ASTM D412, Die A	100% min
Tear Strength	ASTM D624, Die C	4.5 lbs/in min
Service Temperature <i>Applications below -40°F, please contact Milcut</i>	ASTM D534	-297° to 220°F
Water Vapor Permeability (Dry Cup)	ASTM E96	<0.01 perm-in
Water Absorption (Volume Change)	ASTM C209	0%
Flame Spread/Smoke Development	ASTM E84	<25/50
Flammability	ASTM D635 UL94-5VA (Recognition No. E300774) FMVSS 302 FAR 25.853	Self-Extinguishing Pass Pass Pass
Dimensional Stability	ASTM C534	<7% Linear Shrinkage
Hot Surface Performance (250°F for 96 hrs)	ASTM C411	No cracking or delamination
Ozone Resistance	ASTM D1171, Method A 72 hrs @ 50 pphm @ 40°C Mandrel Size: 2.0 in	Pass Rating 0 - No cracks
Odor Emissions	ASTM C1304	No Objectable Odor
Chemical/Solvent/Oil/Grease Resistance		Good
Flexibility <i>Cold Crack Test @ -40°F</i>	ASTM C534 ASTM D1056	Excellent Pass
Mildew Growth Resistance/Air Erosion	UL181, ASTM G21	Pass
Corrosion Risk	DIN 1988	pH neutral: 6.6±0.04
Leachable Chlorides	DIN 1988	<0.05% water-soluble chloride ions
UV/Weather Resistance	ASTM G90	Good, Minor cracking
Specification Compliance	Ford: WSS-M99P32-C Ford: WSK-M2D419-A GMW: 15473  Chrysler: MS-AY-516 Chrysler: MSZ-75 J18	Type II Class I, Type IV (Tensile deviation) Type I 2C1

### Typical Physical Properties: Fabric

Specification	Test Method	Typical Results
Basis Weight	ASTM D3776-09	3 osy ± 15%
MD Tensile @ Peak	ASTM D5034-09	40 lbs min
CD Tensile @ Peak	ASTM D5034-09	30 lbs min
MD Elongation @ Peak	ASTM D5034-09	31% min
CD Elongation @ Peak	ASTM D5034-09	50% min
MD Trap Tear	ASTM D4533-91	15 lbs min
CD Trap Tear	ASTM D4533-91	12 lbs min
Flammability	FMVSS-302	Pass

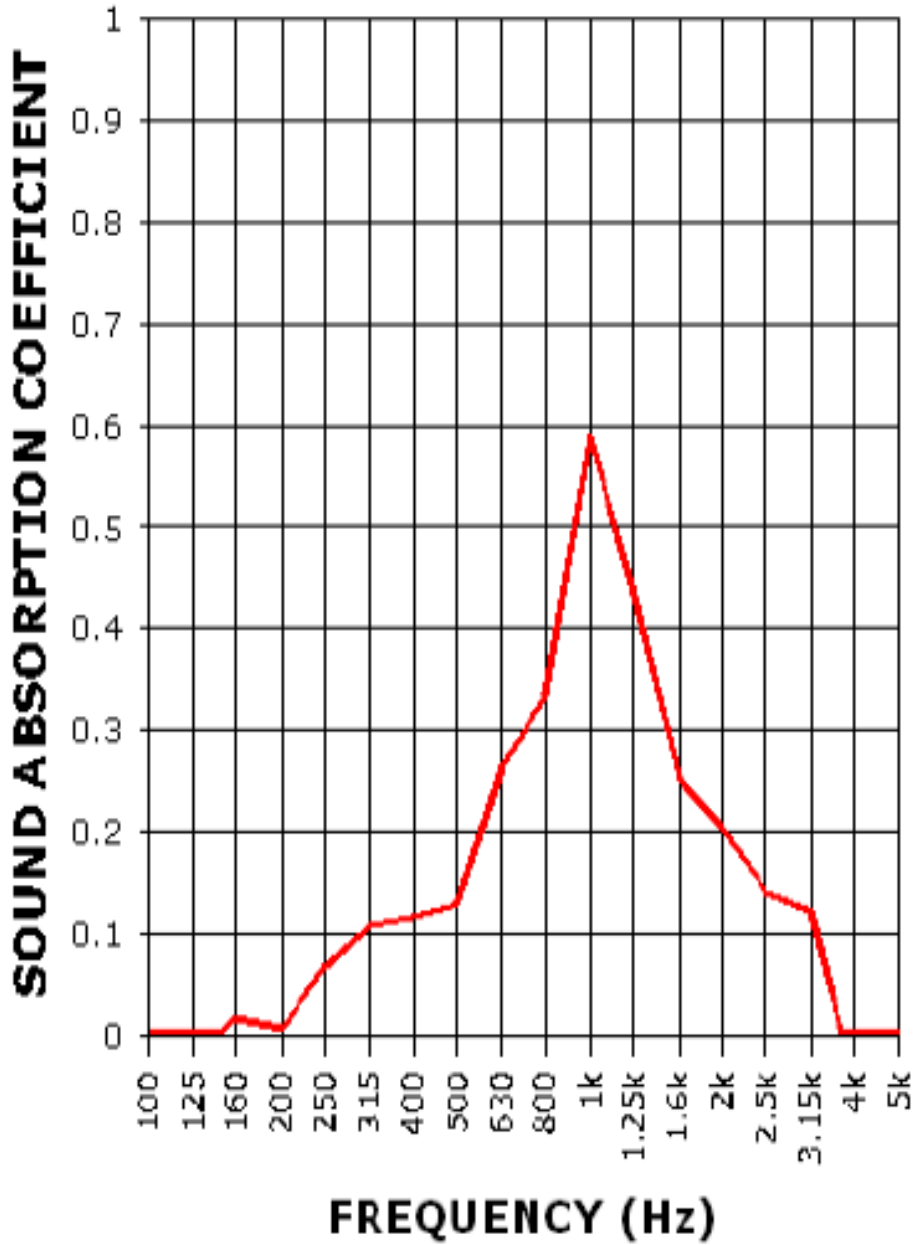
### Closed Cell Foam Sound Data: 1 in Foam

1/3 Octave Center Frequency (Hz)	Absorption Coefficient	Total Absorption In Sabins
100	0.00	0.00
125	0.00	0.00
160	0.02	1.19
200	0.00	0.34
250	0.07	4.83
315	0.11	7.66
400	0.12	8.22
500	0.13	9.21
630	0.26	18.75
800	0.33	23.80
1000	0.59	42.04
1250	0.43	30.90
1600	0.25	18.07
2000	0.20	14.52
2500	0.14	9.92
3150	0.12	8.65
4000	-0.05	-3.72
5000	-0.07	-5.06

**SAA = 0.22**

**NRC = 0.25**

## Sound Absorption Coefficient: 1 in Foam



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