



Physical Properties

Test Results on un-pigmented Scorpion Truck Bed Lining Material:

Property	Effect	Testing Standard
Freezing Temperature	N/A	None Determined
Heat - Change in Properties @ 180°F	No Effect	Atkins 33034-F
Freeze Affect to -40C	Remains Flexible	TA-DSC 2920
Tear, Die C	351.7 psi	ASTM D624
Flexibility B Mandrel Bend	Excellent (10-no cracking)	GM9503P
Water absorption	Volume change = 0.0%	ASTM D471
	Change in mass = 0.9%	ASTM D471
Tensile Strength	2,300 psi pounds	ASTM D-638
Elongation	453 %	ASTM D-638
Hardness		
Hardness (Shore A)	88	ASTM 2240
Weather Resistance		
Cracking/Craze 1,500 hours	10 Excellent	ASTM D 660/661
Weathering 2,500 hours	1.54 (CIE) Excellent	QUV 340 lamps
Color Stability 2,500 hours	-0,45 (Hunter) Excellent	SAE J 1960
Electrical Properties – Static Discharge		
Static Decay	0.09 sec. - Excellent	NFPA 99

A static decay time of less than one second means that static electricity will not accumulate to dangerous levels on surfaces coated with Scorpion X-O2.

Resistance to Common Substances/Chemicals

ASTM D543, Practice A

Tap Water	No Change
Deionized Water	No change
PEAK All weather windshield washer	No Change
Dermassage Dishwashing Liquid	No Change
STP Brake Fluid	Color Change/Loss of gloss
Zerex Antifreeze Coolant	No Change
Exxon 5W-30 Motor Oil	No Change
#2 Speedway Diesel Fuel	Very slight Swelling-small blisters
87 Octane Unleaded Gas	Slight swelling in all directions
Battery Acid	Very, very slight Lightening of Color
Ammonium Nitrate	No Change
Hydraulic Fluid (Aircraft Grade)	No Change
Hydraulic Fluid (Automobile Grade)	No Change
Hydraulic Fluid (Heavy Equipment Grade)	No Change
Hydrofluoric Acid – 37 %	No Change
Hydrofluoric Acid – 50 %	Swelling/Blisters/Loss of Surface
Rock Salt Solution	No Change
Hydrochloric Acid – 37%	Swelling/Loss of Gloss/Blisters
Hydrochloric Acid – 20%	No Change

Coefficient of Friction (Slip Resistance)

0.67	Wet surface average	ASTM F1679-04	Industry standard calls for a minimum 0.5 for a normal walking surface, or, for a minimum 0.6 to 0.7 for a wet/working surface. ASM 725 slip meter is used by the insurance industry for onsite verification of slip resistance for flooring surfaces.
0.85	Dry surface average	ASTM F1679-04	
0.74	low average when wet	ASM 725 slip meter	
0.83	low average when dry	ASM 725 slip meter	