

VSC Acoustical Foam Materials

MC5294 – Urethane Foam with Polyurethane Film

This material is MC5200 flame laminated to a thin, black urethane film, which is specifically designed to prevent liquid ingress and to improve UV resistance at the outer foam face. Unlike the, MC5259, high frequency absorption is unaffected but it is not effective much below 500Hz. Most commonly used in marine engine room and mobile generator applications to reduce the high frequencies produced from turbo charged engines, while maintaining good reductions down to 500Hz. It is also recommended where there may be mild chemical, oil or water mist present and to protect the acoustic foam against airborne lint or dirt.

This product has a proven history of noise control success in the following applications:

Marine Engine Rooms

Truck Hood Baffles

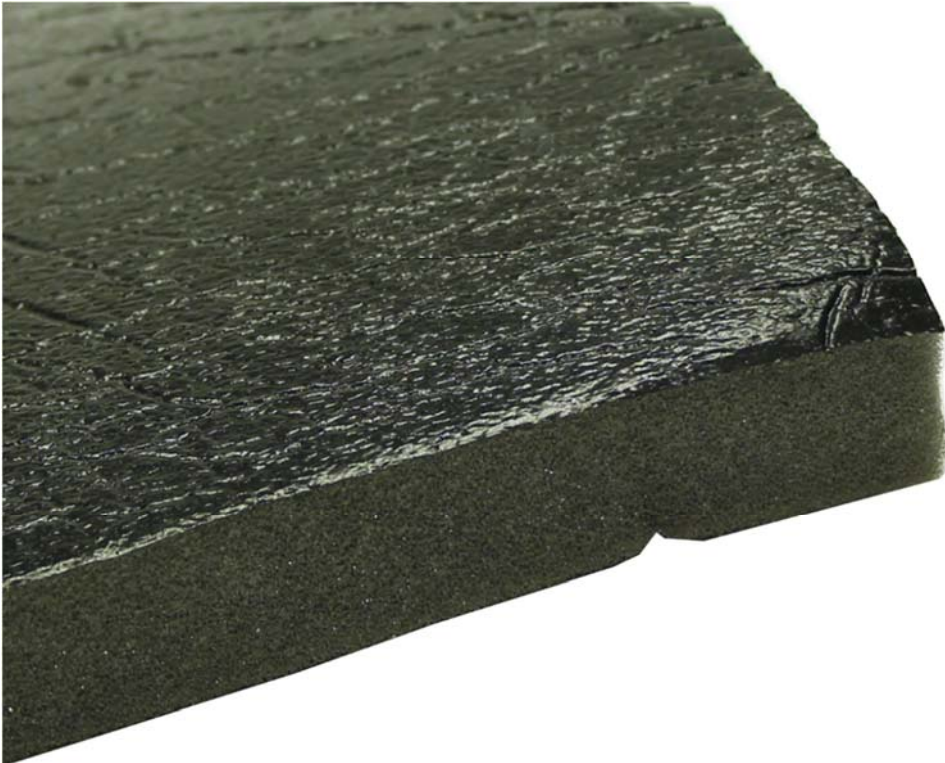
“Lawn & Garden” Noise Control

“In Plant” Noise Control

Decorative Acoustics

Duct Lining

Office Equipment Noise Control



Physical Properties

FOAM (ASTM D 1564)

Type:

-Flexible polyester open cell urethane

Colour:

-Charcoal Grey

Density:

- 1.8 – 2.2 lb/ft³

Tensile Strength:

- 15 lb/in²

Tear Strength:

- 2 lb/in

“K” Factor:

- .25 BTU/hr./ft²/°F/in.

Elongation:

- 200%

Compression Set:

- 15% max (50% deflection @ 158% F, 22 hrs.)

Cell Size:

- 60 cells/in.

Flammability:

- MVSS 302, SAE J369 a (S.E.), UL-94 HF-1 (when requested). . **(NOTE: WE STOCK ONLY PRODUCT MEETING UL-94 HF-1).**

POLYURETHANE FILM

UV Stability

- Slight change in physical properties
– 1,000 Hrs. in Atlas weatherometer

Solvent Resistance

Acetone

– Significant loss of properties and significant swelling

ASTM Fuel A

– Slight loss in properties, slight swell

ASTM Oil #1 & #2

– Little or no change

Continued.....



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AVAILABILITY:

Die Cut Parts 54" Wide Width Roll Stock Colour: Black

Milcote Edge Coating Laminated vibration damping barrier

Thickness: 1" (other thicknesses by special order)

ACOUSTIC PROPERTIES:

The following sound absorption results are based on a test of 1" thick material that conformed with the requirements of the American Society for Testing and Materials Method of Test for Sound Absorption of Acoustical Materials in Reverberation Rooms, ASTM Designation C423-84a and E795

1/3 Octave Band Center Frequency, Hz							
	125	250	500	1000	2000	4000	NRC
Absorption Coefficients	.13	.25	.76	1.07	.76	.88	.70

Absorption values are measured with an uncertainty of less than 1% with a confidence level of 95% at frequencies of 250 Hz and above. At frequencies below 250 Hz, the uncertainty is less than 1.5% with 95% confidence level. The noise reduction coefficient (NRC) is the average of the coefficients at 250, 500, 1000 and 2000 Hz, expressed to the nearest integral multiple of 0.05.

Ethylene Glycol
– Slight loss in properties, slight swell.

Gasoline
– Light loss in properties, slight swell

Chemical Resistance

Hydrochloric Acid 10%
– Significant loss of properties and significant swelling

Sodium Hydroxide 20%
– Swelling and some loss in properties

Thermal Properties

Service Temperature - -65° - 225°F
(Supported application) (Softens at 200°F)