Dow Automotive

BETAFOAM™ 87100/87120

NVH Foam

Description

BETAFOAM* 87100/87120 are two components used to make a low-density, all-water blown rigid polyurethane foam. These components were engineered to produce a foam for providing barrier protection against airborne noise. Foam is produced by the rapid mixing of both components under high shear conditions. These components were formulated for fast reaction and high volume expansion. The foam has adhesion to primed metal surfaces.

Specifications

BETAFOAM 87100/87120 meets Ford WSS-M2D356-B2 and Chrysler MS-CD643 specifications.

Typical Applications

BETAFOAM 87100/87120 is used to produce foam for blocking automotive body cavities that convey airborne noise into the passenger compartment.

Application Technique

BETAFOAM 87100/87120 can be pumped from bulk containers into a heated meter mix equipment. The proper mix ratio is in turn dispensed manually or robotically through an impingement mix gun. Adequate ventilation is recommended while dispensing this system.

Safety Precautions

Keep away from heat, sparks, and open flames. Use only with adequate ventilation. Avoid breathing vapors. If swallowed, call physician immediately. For eye contact, flush with water for 15 minutes and get medical attention. For skin contact, wash with soap and water. Refer to Material Safety Data Sheet for details.

Packaging

BETAFOAM 87100/87120 is available 55-gallon metal drums.

Storage

BETAFOAM 87100/87120 must be stored in airtight, dry containers at temperatures below 120°F (49°C).

Storage Stability

Shelf life is dependent upon storage temperature of the material. Shelf stability is assured for 180 days from the date of shipment when stored according to the above storage requirements.

Cured Physical Properties

Free Rise Density, lbs/ft^3 (kg/m^3)**	2.0 (32)
Volume Expansion, % Minimum**	3400

All values are typical and not intended for specification use.
Form: 299-50223

Uncured Physical Properties

	87100	87120
Composition	MDI & PMDI Isocyanate	Polyether/ Polyol Blend
Appearance	Brown	Clear-Yellow-Orange
Solids Content, Wt %	100	100
Flash Point, °F (°C) ASTM D-92	>300 (150)	>300 (150)
Weight per Volume, lbs/gal (g/cc)	10.23 (1.23)	8.56 (1.03)
Viscosity, (cps) @ 77°F (25°C)RVT, #1, 10 RPM	165	700
Mix Ratio		1:1 by Volume 1:0.85 by Weight
Gel Time, sec**		3 - 4
Tack Free Time, sec**		10 - 15
Thixotropy		Non-sag

Performance Properties

Compression Strength, psi (kPa) Minimum ASTM D1621A 23 °C and 50% RH	15 (103)
Water Absorption, % SAE J315 Requirement ≤ 8%	6
Dimensional Stability per ASTM D2126, %	
48 hours @ 250 ± 4°F (121± 2°C)	<1
7 days @ 215 ± 4°F (102± 2°C)	<1
7 days @ 100 ± 2°F (38± °C), 98 - 100%RH	<1
Heat Aged Weight Loss, %	
24 hrs. @ 250 ± 4°F (120± 2°C)	<1
Cold Impact per DCX LP-463NB-13-01-D 10 cycles 3 samples tested Requirement – No cracking or loss of adhesion	PASS - No cracking or loss of adhesion.
Flammability per SAE J369 3 samples tested. Maximum burn rate – 100 mm/min.	PASS Actual – 56.5 +/- 6.2
Fogging per ASTM D5308 N 6 hrs. @ 90 C 3 samples tested Minimum requirement - 90	PASS Actual – 99.6 +/- .2

**Dependent upon dispensing equipment parameters

EITHER IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL, OR CONSEQUENTIAL, ARISING OUT OF THE USE AND OR THE INABILITY TO USE THE PRODUCT. No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.

HEADQUARTERS

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