AzoCore™ BY AZON

Product Data Sheet

DAMPER 10-352

Polyurethane Foam Insulation

Product description

The AzoCore™ DAMPER 10-352 system is a rigid, two-component, polyurethane foam, formulated to enhance insulation and structural strength in aluminum damper systems. It improves energy efficiency, condensation resistance, and it is free from CFCs, HCFCs, and other ozone-depleting substances.

Features and benefits

- Reduces thermal transmission
- Material color is customizable
- No aluminum distortion
- Compatible with anodized and mill finish
- Impervious to water

Table 1: Physical properties of uncured materials

	13-302A A-ISO	AzoCore DAMPER 10-352 B Resin	Measurement
Appearance	dark brown liquid	black liquid	
Specific gravity at 77°F (25°C)	1.237 ± 0.006	1.050 ± 0.003	
Viscosity at 77°F (25°C)	200 ± 50	450 ± 50	centipoise

Table 2: Processing parameters

	Value	Measurement
Mix ratio 13-302A per AzoCore DAMPER 10-352	104 ± 6 / 100	grams
Mix ratio 13-302A per AzoCore DAMPER 10-352	88.3 ± 5.1 / 100	milliliters
13-302A temperature	25 (77)	degrees Celsius (Fahrenheit)
AzoCore DAMPER 10-352 temperature	25 (77)	degrees Celsius (Fahrenheit)
Cream time	35 ± 3	seconds
Rise time	2′ 30″ - 3′ 30″	minutes / seconds

All mixing and tests were conducted at 25°C (77°F) unless otherwise noted.

Cream time and rise time will vary slightly with variation in ambient and chemical temperatures.

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Table 3: Performance characteristics of cured material

	SI	IP	Test method
Thermal conductivity K-factor	0.029 W/m²-K	0.22 Btu-in/(hr-°F-ft²)	ASTM C518-10
Thermal resistivity - r	34.483 K-m/W	4.969 hr-ft² °F/Btu-in	ASTM C518-10
Density	0.1602 ± 0.016 g/cm³	10 ± 1.0 lb/ft³	ASTM D1622
Tensile strength	2.6 ± 0.15 N/mm²	360 ± 20 psi	ASTM D638
Elongation	5 ± 1%	5 ± 1%	ASTM D638
Notched Izod impact	5.9 ± 0.5 J/m	0.110 ± 0.01 ft*lbs/in	ASTM D256
Heat distortion at 0.46 Mpa (66 psi)	58 ± 2°C	136 ± 3.6°F	ASTM D648
Compressive strength	2.5 ± 0.9 N/mm²	370 ± 10 psi	ASTM D1621
Shore B hardness	46 ± 2		ASTM D2240

Note: The test data herein stated are typical values, which may be used as a guideline in evaluating the material for its intended use. We recommend that polymer properties be tested on a regular basis.

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Adhesion

The adhesive performance of insulating polyurethane chemicals largely depends on the condition of the substrate. For optimal bonding, aluminum should be free of dirt or grease.

Curing

As with all polyurethane polymers, the reactivity and curing of AzoCore DAMPER 10-352 varies depending on the temperature of both the chemicals and the aluminum dampers. To ensure proper curing, it is recommended that both the chemical components and the dampers be maintained at 25 ± 5°C (77 ±10°F). The metal temperature should not fall below 18.3°C (65°F). Processing outside these temperature ranges can result in curing inconsistencies, fabrication issues, or dimensional distortion.

AzoCore DAMPER 10-352 is not to be used for any other applications unless it is approved by written consent from Azon.

Storage and Handling

AzoCore chemicals are very stable materials when properly handled. To avoid problems, it is important to understand that these materials are sensitive to moisture. Containers must be stored in a dry area where the temperature range does not fall below 10°C (50°F) and does not exceed 37°C (100°F) for prolonged periods.

The expected shelf life of Azon chemical products is 12 months. When properly stored in unopened, sealed containers, the shelf life may be considerably longer. It is important to observe good inventory control by using the first in, first used practice.

When removing the chemical supply from the machinery, always reseal the partially full container with dry nitrogen or dry air (dew point below -40°C [40°F] to protect the contents from moisture contamination.

Disposal

Care should be taken to protect our environment. The user of this product has the responsibility to dispose of unused material or residue in compliance with local governmental guidelines regarding the disposal of nonhazardous and hazardous waste.

Health and safety

Safety data sheets and product labels must be reviewed prior to use or handling the material. Ordinary hygienic principles, such as washing the compound from the hands before eating or smoking, should be observed. Hands should be washed with a waterless cleaner followed by soap and water. Avoid breathing of vapors, prolonged contact with the skin, contact with open breaks in the skin and ingestion. Use with adequate ventilation.

Ordering

To place orders or for pricing information, please contact Azon customer support at 1.800.788.5942.