



Product Data

Q-25 Robofoam Mastic Sealant

Issue Date: 11/03/2010

Purpose

This product is designed for use as a foamed-in place gasket. It is generally applied thermally through fixed of flexible automation. As with other members of the ROBOFOAM family, the material can be applied as a solid or foamed product. It is more cost effective than traditional die-cut gaskets (foamed or solid) and almost all foamed tape and adhesive systems. Moreover, since it is applied-in-place it cannot be stretched or distorted at the time of assembly and therefore provides a more functional and lasting protective shield. Developed initially for the window and door industry, this product can also be used for other applications requiring adhesion to plastic, wood, and painted metal surfaces for gasketing and sound deadening.

Composition

This product is from a family of thermal mastics made from combinations and blends of elastomers, butyls, E.P.D.M.'s and *proprietary polymers. The other ingredients consist of antioxidants, fungicides and organic processing aids.

Detail

This changes depending upon the substrate and chemical resistance required.

Application

This is intended for use in factory application. The application should be made using a Nordson FoamMelt® unit (or similar equipment) at a setting of 350°F. The gas demand for the nitrogen cylinder should be set at 40 psi. For best adhesion the orifice of the nozzle must be held close to the bead that is being applied. It is recommended that the distance be no more than one-half the thickness of the bead. For proper set up consult the compound manufacturer for proper speed setting, orifice size, and pressure requirements. For better height to width ratios, a Nordson Foam Mix should be evaluated.

Test Data

Color: natural state – black; in foamed state – dark grey to black

Odor: very slight

Water Resistance:

Unfoamed - .0%
Foamed @ 30% - .2%
Foamed @ 70% - .5%

Flash Point: Pensky Martin CCC - 380°F

Melt Point: Ball & Ring, 300°F - 320°F

Tensile Strength: ASTM D412, Die "C" 65psi

Slump: no slump or sag

Staining #44 Whatman Paper: Contact stain-no migration

Taste Test: Will not impart taste or odor to sweet unsalted butter.

Weight/Gallon: 7.3lbs in solid state

Heat Resistance: 2 weeks at 180°F – no change, 2 weeks at 100°F & 100% relative humidity – no swelling or loss of adhesion.

Peel Adhesion: GM 3602M 4.1, Modified to 500mm/min Polypropylene 40% filled, 180° Peel = 227 N/M, 90° - 320 N/M

Shore '00' Durometer: Shore A Durometer (unfoamed) – 40 Shore 00 Durometer (foamed) - **45

Heat Loss: 24 hrs at 420°F – 1.1%, 21 days at 120°F - .05%

Elongation to Break: 0°F(-18°C) – 800%; 77°F(25°C) – 200%

Cold Temperature: Resistance to 180°F 3/8" Mandrel bend at -40°F - Passes

Compression Set: 1 week at 160°F at 50% compression and a 24 hour recovery time. (closed cell) – 26% recovery

Fogging Test GM9068P: Sample Temp 158°F, 1 hr – 95% Reflectance, Glass Plate 100°F – 24 hr 99% Reflectance, Duration – 6 hours



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Clean Up/Precautions

The material can be cleaned from tools and equipment with a light application of mineral spirits.

Prolonged exposure to temperatures exceeding 375° will result in a thermal breakdown of the compound and greatly reduce its physical characteristics and performance.

Packaging

55 gallon fiber drums, 5 gallon fiber pails and 3.7 pound slugs.

Freight Classification

Caulking Compound, "NOIBN" (No Red Label Required). Class 55, Item No. 149610

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