



DOWSIL™ 5-8733 Fluorosilicone Sealant

Features & Benefits

- One-part, 100% fluorosilicone
- Supplied as a non slumping paste
- Cures as a tough rubbery solid
- Cures on exposure to atmospheric moisture, no acetic acid released
- Noncorrosive cure
- Wide temperature range
- Excellent resistance to fuel and solvents

Applications

- DOWSIL™ 5-8733 Fluorosilicone Sealant is used for bonding, sealing and caulking applications where resistance to the swelling effects of jet fuels, gasolines, chemicals are required and where a noncorrosive feature is also required.

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
As Supplied		
Color		Gray
Slump, (MIL ¹ -5-7502)	inches	0.05
Extrusion Rate, 90 PSIG 1/ 8" Orifice	grams/minute	100
Tack Free Time, 25°C/50% RH	minutes	30
As Cured – 7 Days at 25°C and 50% RH		
Specific Gravity		1.40
Durometer, Shore A		46
Tensile	psi	400
Tear, Die B	ppi	30
Elongation	%	190
Brittle Point	°F	-63
Peel Strength, 2024 Clad Aluminum with DOWSIL™ PR-1200 RTV Prime Coat	ppi	20

1. MIL: Military Specification and Standards

Typical Properties (Cont.)

Property	Unit	Result
24 Hours at 260°C Post Cure		
Durometer, Shore A		38
Tensile	psi	270
Elongation	%	150
Volume Swell		
JRF, 24 Hours/25°C	%	17
JP-4 Jet Fuel, 24 Hours/25°C	%	5.4

Description

DOWSIL™ 5-8733 Fluorosilicone Sealant is a ready-to-use one-part, 100% fluorosilicone room temperature curing sealant. The sealant cures on exposure to atmospheric moisture and no acetic acid is released during curing. The sealant is noncorrosive to steel, aluminum, brass and many other substrates. The cured rubber has excellent fluid resistance to most hydrocarbon fluids and to many chemicals.

DOWSIL™ 5-8733 Fluorosilicone Sealant adheres to most materials. It can be applied overhead or vertical surfaces without fear of sagging, slumping or running off. Other significant product features include:

- One-part, easy to cure
- Fast curing
- Non slumping paste
- Good adhesion
- Noncorrosive to most substrates
- -65°F to 450°F temperature range
- Excellent solvent/fuel resistance

How to Use

The surface should be free of all contaminants such as oils, grease, dust etc. Solvent cleaning and slight scuffing to slightly ruff the surface will improve adhesion. The surface should be dry and clean before applying sealant.

Adhesion

DOWSIL™ 5-8733 Fluorosilicone Sealant can provide unprimed adhesion to many substrates. However, DOWSIL™ 1200 OS Primer is recommended to insure a stronger, more uniform bond. The time required for the adhesive to cure depends on the thickness of the rubber, temperature, and the amount of moisture in the air.

Bond strengths will continue to increase for several days after setup is complete. Where narrow sections are being bonded, full strength will be reached in about 7 days. Heavy sections will require more time.

Curing

DOWSIL™ 5-8733 Fluorosilicone Sealant begins curing upon exposure to the air. The cure time is dependent upon the thickness of the sealant and the degree of confinement.

Curing (Cont.)

It should be noted that absolute confinement can prevent cure. DOWSIL™ 5-8733 Fluorosilicone Sealant is not recommended for fay surfaces. Applications involving confinement during cure should be thoroughly tested before commercialization. Additionally, inadequate cure can result in a softening of the sealant at elevated temperatures.

Abnormal Exposures

Small amounts of highly toxic vapors may be evolved if material is heated above 149°C (300°F) or burned. If used above 149°C provide adequate ventilation.

Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

When stored at or below 32°C (90°F), DOWSIL™ 5-8733 Fluorosilicone Sealant has a shelf life of 6 months from date of manufacture.

Since moisture in the air will cause the sealant to cure, containers should always be sealed when not in use. Once a container has been opened, a plug of cured sealant may form in the nozzle or tube tip during storage. This is easily removed and does not affect the remaining material.

Packaging Information

DOWSIL™ 5-8733 Fluorosilicone Sealant is available in 6 fluid ounce Semco cartridges.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Shipping Limitations

None.

Health and Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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