**Product Information**

Silicone Sealant

DOW CORNING

# *Dow Corning*® 732 Multi-Purpose Sealant

## FEATURES

- Will not slump, sag or run off surfaces
- Non-flowable; can be applied without slumping or running off
- Good resistance to weathering, moisture and temperature extremes
- Broad temperature range performance; cured material stays flexible for continuous use from -76 to 350°F (-60 to 177°C) and up to 400°F (204°C) for intermittent use. In cases where slightly higher temperature performance is required, *Dow Corning* 732 Multi-Purpose Sealant – Black remains flexible for continuous use up to 400°F (204°C) and intermittent use up to 450°F (232°C).
- Adheres to a variety of surfaces
- 100 percent silicone rubber
- Meets the requirements of many industry standards, OEM applications and specifications

## COMPOSITION

- One-part silicone rubber supplied as nonslumping paste

**General-purpose sealing and bonding as a space-filling rubber adhesive or a formed-in-place gasket**

## USES

*Dow Corning*® 732 Multi-Purpose Sealant is designed for a number of diverse sealing and bonding applications. This sealant can be used for:

- Adhering auto, aircraft and appliance trim, including metal, fabric and fabric-backed plastics
- Bonding gaskets in heating and refrigeration units
- Attaching screwless brackets, nameplates, signs and sign letters
- Sealing windows in oven doors and flues on gas appliances, flanged pipe joints and access doors
- Providing formed-in-place gaskets for gear boxes, compressors and pumps
- Sealing trailers and truck cabs
- Bonding and sealing appliance parts
- Sealing marine cabins and windows
- Filleting and caulking joints in sheet metal stacks, duct work and equipment housings
- Protecting components from moisture from frequent wash downs or weathering
- Sealing aircraft galleys and interiors

## DESCRIPTION

*Dow Corning* 732 Multi-Purpose Sealant is a paste-like, one-component silicone RTV designed for a wide variety of industrial sealing and adhesive applications. It cures at room temperature by reaction with moisture in the air to produce a durable, flexible silicone rubber.

## USE LIMITATIONS

*Dow Corning* 732 Multi-Purpose Sealant is not recommended:

- For continuous underwater immersion where adhesion or structural bonding is required
- On concrete, brick, mortar or other masonry surfaces
- For bonding uncured sealant directly to hot surfaces
- On surfaces to be painted; paints do not adhere well to sealant (paint before applying sealant)
- On materials such as impregnated woods or oil-based caulks that bleed oils
- In totally confined areas; atmospheric moisture is required for cure
- On *Teflon*®[1]-coated materials, polyethylene, polypropylene or methylmethacrylate (*Plexiglas*®[2]); sealant will not adhere well
- On or near sensitive metals such as copper, brass, zinc, carbon steel, galvanized iron or magnesium; these metals may be corroded, especially in confined cure conditions, due to the acetic acid released during the cure

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

[1]Registered trademark of E.I. du Pont de Nemours Co.
[2]Registered trademark of Pittsburgh Plate Glass.

## TYPICAL PROPERTIES

**These values are not intended for use in preparing specifications.**

| Method | Test | Unit | Result |
|---|---|---|---|
| **As Supplied** | | | |
| CTM[1] 0062 | Flow, sag or slump | inches | Nil |
| | Colors | | Aluminum, black, clear, white |
| CTM 0097 | Specific Gravity at 77°F (25°C) | | 1.04 |
| CTM 0364 | Extrusion Rate (1/8-inch orifice, 90 psi air pressure) | g/min | 350 |
| **Cure Characteristics – Exposed to Air at 77°F (25°C) and 50% RH** | | | |
| CTM 0098 | Skin-Over Time | min | 5-10 |
| CTM 0095 | Tack-Free Time | min | 20 |
| | Cure Time, 1/8-inch bead | hours | 24 |
| **Physical Properties – As Cured 7 Days at 77°F (25°C) and 50% RH** | | | |
| CTM 0099 | Durometer Hardness, Shore A | points | 25 |
| CTM 0137A | Tensile Strength | psi | 325 |
| CTM 0137A | Elongation | percent | 600 |
| CTM 0069 | Thermal Conductivity, | | |
| | | BTU per ft-°F-hr | 0.11 |
| | | cal/cm-°C-sec | $0.44 \times 10^{-3}$ |
| **Electrical Properties – As Cured 3 Days at 77°F (25°C) and 50% RH** | | | |
| CTM 0313 | Volume Resistivity | ohm-cm | $1.5 \times 10^{15}$ |
| CTM 0114 | Dielectric Strength | volts/mil | 550 |
| | Dielectric Constant | | |
| CTM 0112 | at 100 Hz | | 2.8 |
| CTM 1139 | at 100 kHz | | 2.8 |
| | Dissipation Factor | | |
| CTM 0112 | at 100 Hz | | 0.0015 |
| CTM 1139 | at 100 kHz | | 0.0015 |

[1]CTMs (Corporate Test Methods) correspond to standard ASTM tests in most instances. Copies of CTMs are available upon request.

**Specification Writers: Please obtain a copy of the Dow Corning Sales Specification for this product and use it as a basis for your specifications. It may be obtained from any Dow Corning Sales Office, or from Dow Corning Customer Service in Midland, MI. Call (517) 496-6000.**

## LISTINGS/SPECIFICATIONS

- Complies with FDA Regulation 21 CFR 177.2600 for incidental contact with food
- National Sanitation Foundation, List 51, for direct food contact, and List 61, for use with potable water
- Recognized under UL QMFZ2
- Meets the requirements of Military Specification MIL-A-46106
- Meets a variety of commercial and OEM specifications

## HOW TO USE

### Surface Preparation

Clean surfaces using *Dow Corning*® brand OS (ozone-safe) Fluids or other suitable solvent. Make sure the surface is free of any oil, soap or water. Slight abrasion of the surface may improve adhesion. Priming may be required on some surfaces for better adhesion.

### Primer Recommendations

For metals and many other substrates, *Dow Corning*® 1200 Prime Coat or low-VOC *Dow Corning*® P5200 Adhesion Promoter is recommended. For paints, plastics and organic rubber materials, use *Dow Corning*® 1205 Prime Coat.

Follow surface preparation guidelines above and apply a thin film of prime coat. Allow to dry about 1 hour. Follow complete instructions provided with the primer.

### Masking

Mask adjacent surfaces to ensure neat sealant lines. If masking tape is used to mask an area, it must be removed before a skin forms.

### Application

*Dow Corning* 732 Multi-Purpose Sealant is supplied in ready-to-use form. It extrudes readily from its container under pressure. Apply sealant in a continuous operation by holding the applicator at a 45° angle and pushing the adhesive ahead of the nozzle.

### Tooling

Tool, as needed, immediately after application and before a skin forms. Tooling should be completed within 5 to 10 minutes of application. Alternate periods of application and tooling may be required. A spatula or paddle can be used to tool the surface.

## Cure

*Dow Corning* 732 Multi-Purpose Sealant cures at room temperature on exposure to water vapor in the air, giving off a small amount of acetic acid. Cure time is affected by relative humidity, degree of confinement and cross-sectional thickness of the sealant. Cure progresses inward from the surface. At conditions of 77°F (25°C) and 50 percent relative humidity, a tack-free skin forms within 20 minutes. Sections up to 1/8-inch thick become rubbery solids in about 24 hours at room temperature at 50 percent relative humidity. Higher relative humidity will make the sealant cure slightly faster.

## Cleanup

Remove excessive adhesive with a dry paper towel. Remove masking as soon as tooling is completed.

## USE LIMITATIONS

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

## SHIPPING LIMITATIONS

None.

## STORAGE AND SHELF LIFE

When stored in original, unopened containers at or below 77°F (32°C), *Dow Corning* 732 Multi-Purpose Sealant has shelf life of 30 months from date of manufacture. Refer to product packaging for "Use By" date. Containers should be kept sealed when not in use.

After a container has been opened, a plug of cured material may form in the nozzle or tube tip during storage. When ready to reuse, unscrew the nozzle and remove the cured plug. The remaining sealant is ready to use.

## PACKAGING

*Dow Corning* 732 Multi-Purpose Sealant is available in 3- and 4.7-fl oz (90- and 139-mL) tubes, 10.1-fl oz (300-mL) cartridges and 4.5- and 52-gal (17- and 197-L) containers. Clear and white colors are also available in a 10.3-fl oz (305-mL) squeeze tube kit.

## SAFE HANDLING INFORMATION

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY WRITING TO DOW CORNING CUSTOMER SERVICES, OR BY CALLING (517) 496-6000.

## WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use.

Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. Dow Corning specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability. Unless Dow Corning provides you with a specific, duly signed endorsement of fitness for use, Dow Corning disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.

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