

Dow Corning® 732 Multi-Purpose Sealant

FEATURES & BENEFITS

- One-component adhesive/sealant
- Cures at room temperature when exposed to moisture in the air
- Acetoxy cure system
- Non-sag, paste consistency
- Easy to apply
- Cures to a tough, flexible rubber
- Good adhesion to many substrates
- Stable and flexible from -60°C to +180°C (-76°F to +356°F), with short peaks up to +205°C (401°F)
- Black version: stable and flexible from -60°C to +205°C (-76°F to +401°F), with short peaks up to +230°C (446°F)
- Excellent dielectric properties
- Complies with MIL-A-46106
- Complies with FDA 177.2600
- Available in white, black or clear

General purpose silicone adhesive/sealant (specified)

APPLICATIONS

- General industrial sealing and bonding applications
- Complies with MIL-A-46106 and FDA 177.2600

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

| CTM ¹ | ASTM ² | Properties | Unit | Result |
|--|-------------------|---|-----------------------|------------------------|
| As Supplied | | | | |
| 0176 | | Appearance | Non-slump paste | |
| | | Color(s) | White, black or clear | |
| 0364 | | Extrusion rate ³ | g/minute | 350 |
| 0098 | | Skin-over time | Minutes | 7 |
| 0095 | | Tack-free time | Minutes | 20 |
| Mechanical properties, cured 7 days in air at 25°C (77°F) and 50% relative humidity | | | | |
| 0097B | D1475 | Specific gravity | | 1.04 |
| 0099 | D2240 | Durometer hardness, Shore A | | 25 |
| 0137A | D412 | Tensile strength | MPa | 2.3 |
| 0137A | D412 | Elongation at break | % | 540 |
| 0420 | | Volume coefficient of thermal expansion | 1/K | 1.12 x 10 ³ |
| Electrical properties, cured 7 days in air at 25°C (77°F) and 50% relative humidity | | | | |
| 0114 | D149 | Dielectric strength | kV/mm | 21.6 |
| 0112 | D150 | Dielectric constant at 100Hz/100kHz | | 2.8 |
| 0112 | D150 | Dissipation factor at 100Hz/100kHz | | 0.0015 |
| 0112 | D150 | Volume resistivity | Ohm.cm | 1.5 x 10 ¹⁵ |

¹CTM: Corporate Test Method, copies of CTMs are available on request.

²ASTM: American Society for Testing and Materials.

³Extrusion rate: 3.2 mm orifice at 0.62 MPa.

HOW TO USE

Substrate preparation

All surfaces must be clean and dry. Degrease and wash off any contaminants that could impair adhesion. Suitable solvents include isopropyl alcohol, acetone or methyl ethyl ketone.

Unprimed adhesion may be obtained on many substrates such as glass, metals and most common engineering plastics. Substrates to which good Adhesion is normally not obtained include PTFE, polyethylene, polypropylene and related materials.

However, for maximum adhesion, the use of *Dow Corning*[®] 1200 OS Primer is recommended. After solvent cleaning, a thin coat of *Dow Corning* 1200 OS Primer is applied by dipping, brushing or spraying. Allow primer to dry for 15 to 90 minutes at room temperature and a relative humidity of 50% or higher.

HOW TO APPLY

Apply *Dow Corning*[®] 732 Multi-Purpose Sealant to one of the prepared surfaces, then quickly cover with the other substrate to be bonded.

On exposure to moisture, the freshly applied material will "skin-over". Any tooling should be completed before this skin forms. The surface is easily tooled with a spatula. The Adhesive/Sealant will be tack-free in less than 45 minutes.

CURE TIME

After skin formation, cure continues inward from the surface. In 24 hours (at room temperature and 50% relative humidity) *Dow Corning* 732 Multi-Purpose Sealant will cure to a depth of about 3mm. Very deep sections, especially when access to atmospheric moisture is restricted will take longer to cure completely. Cure time is extended at lower humidity levels.

Before handling and packaging bonded components, users are advised to wait a sufficiently long time to

ensure that the integrity of the adhesive seal is not affected. This will depend on many factors and should be determined by the user for each specific application.

COMPATIBILITY

Dow Corning 732 Multi-Purpose Sealant releases a small amount of acetic acid during cure. This may cause corrosion on some metallic parts or substrates, especially in direct contact or when the cure is carried out in a totally enclosed configuration which would not allow cure by-products to escape.

HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. 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 ON THE DOW CORNING WEBSITE AT DOW CORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

Product should be stored at or below 32°C (90°F) in original, unopened containers. The most up-to-date shelf life information can be found on the XIAMETER[®] Web site in the Product Detail page under Sales Specification.

As *Dow Corning* 732 Multi-Purpose Sealant cures by reaction with moisture in air, keep the container tightly sealed when not in use. A plug of used material may form in the tip of a tube or cartridge during storage. This is easily removed and does not affect the remaining contents.

LIMITATIONS

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

HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

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

LIMITED 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 customers' tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the 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.

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