

#### Technical Data Sheet

## **DOWSIL<sup>TM</sup> Hi-Temp Sealant**

#### **FEATURES**

- Cures to 100% silicone rubber
- Resists the effects of sunlight and weather extremes
- Fast cure, high strength

#### **BENEFITS**

- Performs in high temperature applications, up to 500°F (260°C) continuously, and 550°F (288°C) intermittently
- Remains flexible, will not become brittle, crack, shrink or chalk
- Supplied in removable, reusable, resealable nozzle which saves time and sealant

#### **COMPOSITION**

One-part, acetoxy-cure, RTV silicone

One-part, acetoxy-cure silicone sealant

#### **APPLICATIONS**

- Bag filters on smoke stacks
- Sealing fired heaters, access doors and flanged pipe joints, flues on gas appliances, heating elements in appliances, plywood drying oven doors, windows in oven doors
- Other critical bonding and sealing where parts must perform at high temperatures

#### TYPICAL PROPERTIES

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

Property	Unit	Result
Tooling Time <sup>1</sup>	minutes	5 to 10
Tack-Free Time <sup>1</sup>	minutes	15 to 20
Complete Set-Up Time,1 1/8"	hours	24
Cure System		Acetoxy
Application Temperature Range	°F (°C)	-20 to 122 (-29 to 50)
VOC Content, Inclusive/Exclusive <sup>2</sup>	g/L	33/34
As Cured – After 7 days		
Durometer Hardness Shore A	points	30
Tensile Strength	psi	325
Elongation	percent	500
Temperature Range (Continuous)	°F (°C)	-40 to 500 (-40 to 260)
Movement Capability	percent	±25

<sup>&</sup>lt;sup>1</sup>At 77°F (25°C) and 50% relative humidity.

#### **DESCRIPTION**

DOWSIL<sup>TM</sup> Hi-Temp Sealant is a onepart, acetoxy-cure silicone sealant that cures to a tough, rubbery solid at room temperature on exposure to water vapor in the air. It forms a longlasting, water-resistant seal with  $\pm 25\%$ movement capability when properly applied.

#### **HOW TO USE**

- 1. **Refer** to product packaging for useby date.
- 2. **Temperature.** Apply sealant at temperatures between -20 and 122°F (-29 and 50°C) for best results.
- 3. **Prepare surface.** Cut out and remove all old caulk for repair applications.

<sup>&</sup>lt;sup>2</sup>Based on South Coast Air Quality Management District of California. Maximum VOC is listed both inclusive and exclusive of water and exempt compounds. For a VOC data sheet for a specific sealant color, please contact Dow

- 4. Clean, Two-Step. First, apply solvent to a lint-free cloth and vigorously wipe bonding surfaces to remove dirt and residues. Next, use a dry wipe to remove remaining solvent and residue for optimum cleaning. Repeat if necessary. Surfaces must be clean, dry, oil- and frost-free for best results. (Recommended solvents include isopropyl alcohol, toluene, xylene, naphtha or similar solvent.) Always wear gloves and follow safety precautions and directions on solvent container. DO NOT USE gasoline or kerosene.
- 5. **Install.** Install back-up spacing material for better filling, especially if width exceeds ½" to maximize bonding results. Opencell polyethylene foam backer rod can be used.
- Mask. Apply masking tape to areas adjacent to the joint to ensure straight bead lines. Remove masking tape immediately after tooling and before a skin forms for easy cleanup.
- 7. **Open cartridge.** Cut snub nose above threads, reattach and cut nozzle to desired size. Insert into a caulking gun.
- 8. **Apply.** Extrude sealant with a smooth, steady motion, and ensure complete fill of joint cavity before proceeding.
- 9. **Tool.** Tool the sealant immediately after application and before a skin forms. Remove masking immediately after tooling.
- 10. **Replace cartridge cap.** See "Storage" instructions.

#### **CLEANUP INSTRUCTIONS**

1. Cleanup should start immediately after sealant has been applied/tooled and masking tape removed.

- 2. While wearing solvent-resistant gloves, wipe off excess sealant from surfaces and tools with a solvent-moistened cloth within 10 minutes of application.
- 3. If excess sealant is completely cured, carefully cut or scrape away.
- Avoid contact of uncured sealant with skin and clothing. If contact does occur, wipe with clean rags and wash with water.

**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 WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

# USABLE LIFE AND STORAGE

Product should be stored at or below 32°C (90°F) in original, unopened containers.

To store short term, replace cap. To store long term, unscrew nozzle, screw cap in cartridge and store nozzle in cap.

#### **LIMITATIONS**

- Not for structural glazing
- Not paintable
- Not suited for prolonged submersion in water or below-grade applications

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- May not adhere to oily woods or be compatible with substrates made of methylmethacrylate, polycarbonate, polypropylene, polyethylene, and polytetrafluoroethylene
- Not suitable for surfaces that might bleed oils, plasticizers or solvents, or porous surfaces such as cementlike materials, stone or surfaces prone to attack by weak acids
- May not cure properly if used in spaces confined from atmospheric moisture
- May cause corrosion on some brass, copper, zinc or zinc alloy containing fixtures (galvanized)
- Not for use where abrasion and physical abuse are encountered

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 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, www.consumer.dow.com or consult your local Dow 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

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