



## Technical Data Sheet

### **DOWSIL™ SE 5080 HT-RTV Sealant**

Neutral (oxime type), one-part silicone sealant designed for sealing and bonding applications exposed to temperature as high as 200°C

#### **Features & Benefits**

- One-component sealant for ease of use
- Cures to a flexible silicone elastomer
- Nonacidic cure enables use on a variety of substrates
- Non-sag
- May be used in application exposed to 200°C
- Excellent adhesion properties for substrate such as various metals (except copper/brass), glass, tiles, earthenwares, etc
- Greater UV stability and temperature and weather resistance than organic sealants
- Remain flexible over a wide temperature range (-40–200°C)
- Last longer and need to be replaced less often than many organic sealants, which reduces lifetime costs and contributes to sustainability

#### **Composition**

- One-part
- Neutral cure (oxime type)
- RTV sealant

#### **Applications**

The high temperature properties of this sealant make it ideally suited for:

- General-purpose sealing and bonding
- Sealing and encapsulating heating elements in appliances
- Ovens, heat exchanger, chimney, etc.
- Other critical bonding, sealing, potting, encapsulating and protective coatings where parts must perform at high temperatures

## Typical Properties

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

Test <sup>1</sup>	Property	Unit	Result
	Color		Dark-brown
JISA1439	Tack free (JIS)	min	6
JISK6249	Density	g/cm <sup>3</sup>	1.03
JISK6249	Hardness (JIS type A)		17
JISK6249	Tensile strength	MPa	2.0
JISK6249	Elongation	%	600

1. JIS: Japanese Industrial Standards.

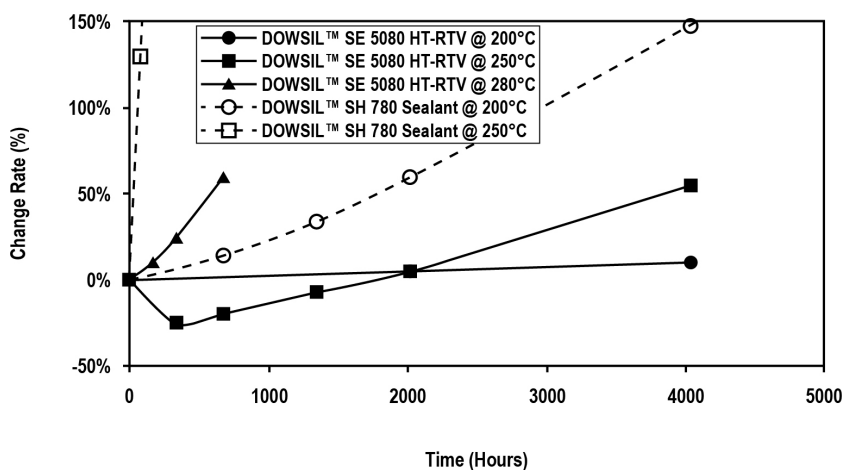
## Description

DOWSIL™ SE 5080 HT-RTV Sealant is a one part, neutral-cure (oxime type) RTV sealant suitable for sealing and bonding applications exposed to temperature as high as 200°C. It easily extrudes in any weather and cures quickly at room temperature.

This cold-applied, non-sagging silicone material cures to silicone rubber upon exposure to atmospheric moisture.

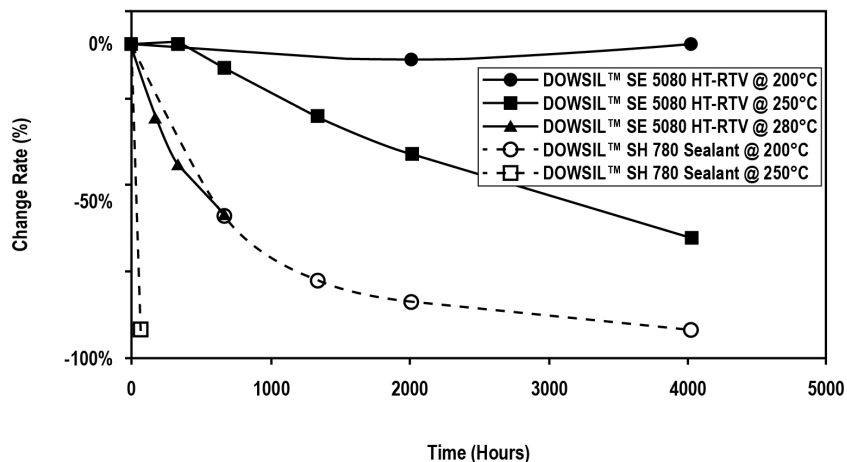
## How to Use

Consult the “Sealant Hand Book,” “JASS8 Waterproofing Work,” and “Technological Indicator Concerning Watertight Design and Construction of the Outside Wall Joint.”



**Figure 1:** Hardness (JISK6249: type A) Change at high temperature for DOWSIL™ SE 5080 HT-RTV Sealant and DOWSIL™ SH 780 Sealant

## How to Use (Cont.)



**Figure 2:** Elongation (JISK6249: Dumbbell No.3) Change at high temperature for DOWSIL™ SE 5080 HT-RTV Sealant and DOWSIL™ SH 780 Sealant.

## Primer

Use primers to increase adhesion to glass, metal, and porous materials. It is recommended to test adhesion properties with the substrate prior to application.

Recommended primers include:

- DOWSIL™ Primer-D3(RF) for glass, metal, varnished metal;
- DOWSIL™ Primer-B for mortar, concrete

Refer to the primer data sheet for details. Please contact Dow Sales Engineer for specific advice.

## Handling Precautions

- The substrate surface should be clean and dry.
- After applying sealant, it is necessary to protect the surface from rain.
- It is necessary to prevent the joint from extensive movement during cure.
- A stain may be visible around the joint when used on an outside wall joint.
- When using an air gun, air pressure should be controlled below 0.3 MPa.
- Sealant quality may be affected by contact with EPDM and Chloroprene.
- Product evolves Methyl Ethyl Ketoxime (MEKO) which may discolor/corrode brass and copper or crack acryl resin and polycarbonate.
- When curing an alcohol sealant on/near or under a cured Oxime sealant, it may discolor. When curing an Oxime sealant on/near or under a cured alcohol sealant, it also may discolor.
- Do not use near an open flame.
- Solvent based primers are highly flammable. Keep away from open flame.

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**

Product should be stored in a cool and dark space in original, unopened containers.

**Packaging Information**

DOWSIL™ SE 5080 HT-RTV Sealant is supplied in 330 ml disposable plastic cartridge. Please contact Dow Sales Engineer for specific advice.

**Limitations**

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

**Health and Environmental Information**

- In case of skin contact, please remove from skin and immediately wash with plenty of soap and water.
- In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Product evolves Methyl Ethyl Ketoxime (MEKO) when exposed to water or humid air. In a chronic oral toxicity animal study, MEKO produced some disabling effects. Provide ventilation during use to control MEKO within exposure guidelines or use respiratory protection.

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](http://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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