



## Technical Data Sheet

### DOWSIL™ HM-2600 Silicone Assembly Sealant

Neutral-cure RTV silicone hot-melt adhesive for assembly applications

#### Features & Benefits

- Instant green strength delivers improved productivity in assembly applications.
- 100% silicone.
- Low volatile organic content < 24 g/L.
- Excellent clarity.
- Neutral moisture cure RTV.
- Non-hazardous composition.
- Primerless adhesion to common substrates.
- Can be used with standard hot-melt dispensing equipment.
- Recommended dispensing temperatures between 115°C and 135°C (239°F and 275°F).
- Pot life up to 24 hours at 120°C (248°F).
- Long open/working time.

#### Composition

- 100% silicone moisture-reactive hot-melt adhesive.

#### Applications

- DOWSIL™ HM-2600 Silicone Assembly Sealant is designed for use as an assembly sealant. It can be used with various types of high-speed automated equipment including XY tables and robots. This product utilizes hot-melt technology to dispense the material. Once applied, this product exhibits instant green strength and cures to a strong, moisture-cured silicone sealant.

#### Typical Properties

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

Test <sup>1</sup>	Property	Unit	Result
CTM 0176	Appearance		Clear
CTM 0044	Specific gravity, uncured		1.08
CTM 1134	Viscosity at 120°C (248°F)	Pa s	> 60
CTM 0839	Nonvolatile content	wt%	≥ 98.5
CTM 0243	Open time <sup>2</sup>	minutes	15

1. CTM (Corporate Test Method) corresponds to ASTM (American Society for Testing and Materials) standard test methods in most instances. Copies of CTMs are available upon request.
2. To ensure adhesion to substrate.

## Typical Properties (Cont.)

Test	Property	Unit	Result
ASTM C961	Cure time, 3 mm bead <sup>3</sup>	days	< 2
ASTM C661	Hardness – durometer Shore A		55–65
ASTM D412	Ultimate tensile strength	psi	> 600
ASTM D412	Ultimate elongation	%	> 1200
ASTM C794	Adhesion-in-peel strength	pli	> 30
ASTM C711	Service temperature range	°C	-50 to 150
		°F	-58 to 302
ASTM D4498	Shear adhesion failure temperature	°C	> 300
		°F	> 572

3. Full cure in a manufactured assembly depends on joint design and exposure to atmospheric moisture.

## Description

DOWSIL™ HM-2600 Silicone Assembly Sealant is a 100 percent silicone, neutral-cure sealant formulated to provide immediate adhesion which offers assembly improvements and can be used in a variety of production applications. Products made with this sealant can be immediately handled. As a viscoelastic material, when cured and then exposed to high temperatures, this product will soften but recovers to its typical properties when cooled down.

DOWSIL™ HM-2600 Silicone Assembly Sealant is available in clear.

## Approvals/ Specifications

- Recognized by UL for 94 HB Flame Rating (File QMFZ2).
- FDA Regulations 21 CFR 177.2600 for aqueous applications.

## How to Use

### Preparation

Surfaces should be clean and dry before sealant application.

### Application

DOWSIL™ HM-2600 Silicone Assembly Sealant is applied from 20 liter pails or 200 liter drums using a heated platen-type bulk hot-melt system. Application temperature is typically between 115°C and 121°C (239°F and 275°F). Application with automated or hand-assisted dispense equipment can begin once the melt temperature is reached.

After applying the sealant to the substrate, this product reacts with atmospheric moisture to form a robust, flexible silicone sealant. Exposure of opened containers with air should be minimized.

## 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.

Material is applied between 115°C and 135°C (239°F and 275°F). Use common personal protective equipment to prevent contacting the hot material with skin or eyes.

**Usable Life and Storage**

When stored at or below 32°C (90°F) in original unopened containers, DOWSIL™ HM-2600 Silicone Assembly Sealant has a usable life of 12 months from the date of manufacture. Refer to product packaging for “Use By Date”.

**Packaging Information**

DOWSIL™ HM-2600 Silicone Assembly Sealant is available in 6 gal (20 L) pails containing 48 lb (22 kg), and 55 gal (200 L) drums containing 452 lb (205 kg).

**Limitations**

DOWSIL™ HM-2600 Silicone Assembly Sealant is not intended for use:

- In spaces totally confined from atmospheric moisture during cure
- In continuous water immersion
- In below-grade applications
- In structural glazing applications
- As an insulating glass sealant
- On surfaces that require painting or staining
- On surfaces that might bleed oils, plasticizers or solvents
- On frost-laden or wet surfaces

Avoid prolonged exposure to citrus containing cleaners, solvents and solvent-based cleaners.

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, [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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