

#### Technical Data Sheet

# **DOWSIL<sup>TM</sup> HM-2600 Silicone Assembly Sealant**

### **FEATURES & BENEFITS**

- Instant green strength delivers improved productivity in assembly applications
- 100% silicone
- Low volatile organic content < 24 g/L (exempt in CA)
- 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

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

#### **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)	Pas	> 60
CTM 0839	Nonvolatile content	wt%	≥ 98.5
CTM 0243	Open time <sup>2</sup>	minutes	15
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 (°F)	-50 to 150 (-58 to 302)
ASTM D4498	Shear adhesion failure temperature	°C	> 300
		(°F)	(> 572)

<sup>&</sup>lt;sup>1</sup>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. <sup>2</sup>To ensure adhesion to substrate.

<sup>&</sup>lt;sup>3</sup>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)

#### **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 WWW.CONSUMER.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, www.consumer.dow.com or consult your local Dow representative.

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