



TBP Converting, Inc.
Dowsil 2400 PDS



DOWSIL™ 2400 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 including XY glazing equipment
- Recommended dispensing temperatures between 115°C and 130°C (239°F and 266°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 the assembly of windows and doors

APPLICATIONS

- DOWSIL™ 2400 Silicone Assembly Sealant is designed for use as a primerless bonding and sealing solution in the assembly of windows and doors. It is used with various types of high-speed automated equipment including XY tables and robots. It can be applied on most common fenestration materials for standard and impact glazing, and is also compatible with most insulating glass sealants.

TYPICAL PROPERTIES

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

| Test ¹ | Property | Unit | Result |
|-------------------|--|---------|-------------------------|
| CTM 0176 | Appearance | | Clear |
| CTM 0044 | Specific gravity, uncured | | 1.08 |
| CTM 1134 | Viscosity at 120°C (248°F) | Pa·s | 70 |
| CTM 0839 | Nonvolatile content | wt% | ≥ 98.5 |
| CTM 0243 | Open time ² | minutes | 15 |
| ASTM C961 | Green strength at 4 hours – aluminum | psi | 4 |
| | Cure time, 3 mm bead ³ | days | < 2 |
| ASTM C961 | Lap shear strength – aluminum | psi | 90 |
| ASTM C661 | Hardness – durometer type A scale | | 60 |
| ASTM D412 | Ultimate tensile strength | psi | 630 |
| ASTM D412 | Ultimate elongation | % | 1300 |
| ASTM C794 | Adhesion-in-peel strength | pli | > 30 |
| ASTM C1184 | Stress-at-break under different conditions – glass | psi | > 100 |
| ASTM C719 | Movement capability | % | ± 50 |
| ASTM C711 | Low temperature flexibility | °C (°F) | -50°C (-58°F) |
| ASTM C793 | Weathering resistance | | Excellent |
| | Service temperature range | °C (°F) | -50 to 150 (-58 to 302) |
| ASTM D4498 | Shear adhesion failure temperature | °C (°F) | > 300 (> 572) |

¹CTM: 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.

²To ensure adhesion to substrate.

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

DESCRIPTION

DOWSIL 2400 Silicone Assembly Sealant is a 100 percent silicone, neutral-cure sealant formulated to meet the demanding requirements of a backbedding sealant for the high speed manufacturing of windows and doors. DOWSIL 2400 Silicone Assembly Sealant delivers instant green strength to offer productivity improvements in backbedding applications. Windows made with DOWSIL 2400 Silicone Assembly Sealant can be immediately handled without the risk of compromising the integrity of the seal or distorting of the sash.

DOWSIL 2400 Silicone Assembly Sealant is available in clear.

APPROVALS/ SPECIFICATIONS

- AAMA 805.2-10

HOW TO USE

Preparation

Surfaces should be clean and dry before sealant application.

Application

DOWSIL 2400 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 and 130°C (239 and 266°F). Application with automated or hand-assisted glazing equipment can begin once the melt temperature is reached.

After applying the sealant to the sash, the glass unit should be installed within 15 minutes to ensure adhesion. Once applied, this product reacts with atmospheric moisture to form a weather resistant, 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 and 130°C (239 and 266°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 2400 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 2400 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 2400 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
- When movement capability greater than ± 50 percent is required

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.

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 customer's 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'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.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A