Imagine enhance productivity, improve reliability and minimize stress with advanced silicone adhesives and sealants

Adhesives and sealants selection guide
Why choose Dow Performance Silicones?

Dow Performance Silicones has been a global leader in silicon-based adhesives for more than seventy years. Headquartered in Michigan, USA, we maintain manufacturing sites, sales and customer service offices, and research and development labs in every major geographic market worldwide, to ensure you receive fast, reliable support for your processing and application development needs.

**Proven product technology**

To describe Dow Performance Silicones is to describe the history and evolution of silicone technology, which generated a legacy of innovative and reliable products under the Dow Corning label for more than seven decades. Today that legacy continues under the DOWSIL™ brand name, which encompasses more than 7,000 proven silicone products and services. Few companies match our adhesives portfolio with comparable breadth, which ranges from time-tested, proven products to unique and versatile technologies like hot melt adhesives.

**Extensive know-how**

Dow Performance Silicones multiplies the value of its products with deep in-house expertise, as well as an extended network of industry resources.

**Collaborative culture**

Dow Performance Silicones works closely with you to help reduce time, risk and cost at every stage of your new product development.

**Stability**

For over seven decades, Dow Performance Silicones has been a global leader, who invests in manufacturing and quality, to help fuel customer innovation through a consistent supply of proven silicone products.
Why Dow adhesives/sealants?
Innovation applied

Whether your module or assembly demands an adhesive that offers proven performance, flexible processing options, or a unique solution to a challenging problem, Dow Performance Silicones can help you achieve your most challenging goals. As a class of materials, silicones generally offer demonstrable benefits over organic-based urethane and epoxy solutions, including:

- Superior stability and reliability across temperatures from -45°C to 275°C
- More physically robust under mechanical stress caused by thermal cycling or mismatched coefficient of thermal expansion
- Extraordinary protection against shock and vibration
- Greater hydro-stability and stronger resistance to chemicals
- Eliminating many of the toxicity issues of organics, helping to reduce special handling precautions
- Simpler processing without the need for oven drying or concerns about exotherms
- Stable pot life and ease of reworkability
- A wide selection range of special features targeting multiple functions like thermal management, improved processing efficiency and others

Choosing the right adhesive or sealant
What’s best for your application?

The silicone adhesives in Dow’s portfolio share many common benefits. Our silicone adhesives, for example, perform reliably from -45°C up to 200°C (or even 275°C in some cases) – a much wider temperature range than organic solutions provide. Most are self-priming materials that form long-lasting bonds, without the need for mechanical fastening and clamping, and many are reworkable to allow for easier module repair. DOWSIL™ adhesives are typically solventless solutions that minimize the need for special storage, handling, or ventilation.

In addition, many of the adhesive products we offer are recognized by various specification authorities, including Underwriter Laboratories and Mil Spec qualifications, to ease compliance for finished parts.

While you may see some similar benefits appear repeatedly throughout these pages, this guide can help you more quickly select the grade, with the optimal performance properties, for your process and adhesive/sealant choice.
Adhesives/sealants

Flowable

Non-flowable

Fast tack-free (≤15 minutes)

Flowable

Non-flowable

Extended working time

Flowable

Non-flowable

Ease of processing, 1-part

Extended working time

Flowable

Non-flowable

Ease of processing, 1-part

Extended working time

Flowable

Non-flowable

Processing flexibility, 2-part

Extended working time and shelf life

Flowable

Non-flowable

Room-temperature cure (RTV)

Deep section fast cure, 2-part

UV + moisture cure

Elevated-temperature cure

Hot melt + moisture cure

DOWSIL™ SE 9100 Adhesive
DOWSIL™ SE 9120 Adhesive
DOWSIL™ SE 9120 S Adhesive
DOWSIL™ SE 9186 Adhesive

DOWSIL™ 730 FS Solvent Resistant Sealant
DOWSIL™ 732 Multi-Purpose Sealant
DOWSIL™ 3165 Fast Tack RTV Adhesive Sealant
DOWSIL™ SE 9168 RTV Adhesive
DOWSIL™ SE 9185 Adhesive
DOWSIL™ SE 9188 RTV Adhesive
DOWSIL™ Q3-1566 Heat Resistant Adhesive/Sealant

DOWSIL™ 7094 Flowable Sealant
DOWSIL™ SE 9152 HT Adhesive

DOWSIL™ 3145 MIL-A-46146 Adhesive/Sealant RTV
DOWSIL™ 6-1104 CV Sealant
DOWSIL™ 738 Electrical Sealant
DOWSIL™ 739 Plastic Adhesive
DOWSIL™ 744 RTV Adhesive Sealant
DOWSIL™ 7091 Adhesive
DOWSIL™ 7092 High Green Strength Adhesive and Sealant
DOWSIL™ 7093 Adhesive Sealant
DOWSIL™ EA-2900 Sealant

DOWSIL™ 7094 Flowable Sealant
DOWSIL™ SE 9152 HT Adhesive

DOWSIL™ 93-076-2 RF Sealant
DOWSIL™ EA-2626 Adhesive
DOWSIL™ EA-3500G Fast Cure Silicone Adhesive
SILASTIC™ Q3-3636 Adhesive

DOWSIL™ SE 9160 Adhesive
DOWSIL™ EA-7100 Adhesive

DOWSIL™ 3-1598 HP Adhesive
DOWSIL™ 3-6876 Adhesive
DOWSIL™ 866 Primerless Silicone Adhesive
DOWSIL™ Q3-6611 Adhesive
DOWSIL™ X3-1598 Adhesive

DOWSIL™ 4-8012 Sealant and Adhesive

DOWSIL™ 3-1595 Silicone Adhesive
DOWSIL™ 3-6265 Thixotropic Adhesive
DOWSIL™ 3-6265 HP Adhesive
DOWSIL™ 4-8012 Sealant and Adhesive

DOWSIL™ EA-6052 Fast Low-Temp Cure Adhesive
DOWSIL™ EA-6060 Adhesive*
DOWSIL™ SE 1720 CV Adhesive

DOWSIL™ 98-083 Silicone Adhesive
DOWSIL™ SE 1700 Adhesive
DOWSIL™ Q5-8401 Adhesive
SYLGARD™ 577 Primerless Silicone Adhesive

DOWSIL™ EA-4600 HM RTV UV Adhesive
DOWSIL™ HM 2600 Silicone Assembly Sealant

*Product only available in Europe
Choosing an adhesive
For fast or simple adhesion

While performance properties certainly influence selection of the right adhesive for your application, the search frequently begins with practical processing considerations. Dow’s broad selection encompasses adhesives that bond easily at low temperatures, to grades that cure within minutes – either through a unique chemical reaction or with the application of heat.

Simple, room-temperature cures
This family of one-part, room-temperature vulcanize (RTV) silicones encompasses our simplest “dispense and forget” adhesive options. They require no mixing or oven equipment to process, and some achieve green strength within minutes to facilitate part assembly. Others allow longer working times to permit adhesives to spread evenly across wide or complex surfaces before cure. Also see our unique Hot Melt RTV Silicone Adhesives on page 6.

Fast-and controlled-cure adhesives
DOWSIL™ accelerated heat-cure adhesives put greater control and processing flexibility into your hands. Standard grades available as one- or two-part formulations enable adhesion in as little as 20-30 minutes at ambient temperatures of 150°C. Select, high-performance grades can cure within minutes at 150°C, or deliver full adhesion within 50 minutes at a more energy-efficient 70°C.
Choosing an adhesive
For specialized processing and performance needs

Dow’s broad portfolio of silicone adhesives encompasses a versatile selection of solutions tailored to meet your most demanding application or processing challenge.

**Specialized fast-cure adhesive**
DOWSIL™ EA-7100 Adhesive significantly expands design and assembly options by enabling strong bonds to a wide variety of substrates, including metals, ceramics, glass and laminates, as well as plastics such as polyethylene, polycarbonate and liquid crystal polymer. In addition, DOWSIL™ EA-7100 Adhesive’s innovative chemistry allows up to 50 percent faster cure time than conventional heat-cure platinum catalyzed silicone adhesive systems. In select applications, cohesive adhesion may be complete within three minutes. As a result, this one-part, heat-cure adhesive may greatly accelerate processing, reduce energy use and cut material costs.

**Fast, flexible UV-cure adhesive**
Part of Dow’s portfolio of room-temperature cure (RTV) silicone adhesives, DOWSIL™ SE 9160 Adhesive offers the option of faster in-line processing through irradiation with ultraviolet (UV) energy at densities as low as 4,000 mJ/cm² to component assembly to continue within seconds. Higher densities (10,000 mJ/cm²) enable the material to quickly achieve full, deep section cure. DOWSIL™ SE 9160 Adhesive bonds well to most substrates, delivers excellent reworkability with no residue, exhibits high flow to fill narrow gaps, and enables cure-in-place-gaskets that offer effective seals compatible with IPX7-rated water resistance.

**Simple and fast: Hot melt adhesives**
DOWSIL™ Hot Melt Adhesives process simply and quickly, offering a unique combination of properties that translate into a lower total cost of ownership vs. conventional thermal cure adhesives and especially double-sided tape. This special class of reactive, neutral cure adhesives dispense easily as a liquid melt, and quickly achieves green strength. DOWSIL™ Hot Melt Adhesives deliver primerless adhesion to glass, plastics, metals, and many other substrates. Consequently, they are helping to enable innovative next-generation products that are more durable, reliable, and waterproof.
Viscosity/hardness profile

![Viscosity/hardness profile graph]

**Viscosity, mPa.S**

**Shore points (A)**

1. DOWSIL™ 3145 RTV Mil-A-46146 Adhesive/Sealant
2. DOWSIL™ 3165 Fast Tack RTV Adhesive Sealant
3. DOWSIL™ 6-1104 CV Sealant
4. DOWSIL™ 730 FS Solvent Resistant Sealant
5. DOWSIL™ 732 Multi-Purpose Sealant
6. DOWSIL™ 738 Electrical Sealant
7. DOWSIL™ 739 Plastic Adhesive
8. DOWSIL™ 744 RTV Adhesive Sealant
9. DOWSIL™ 7091 Adhesive
10. DOWSIL™ 7092 High Green Strength Adhesive and Sealant
11. DOWSIL™ 7093 Adhesive Sealant
12. DOWSIL™ 7094 Flowable Sealant
13. DOWSIL™ EA-2990 Sealant
14. DOWSIL™ SE 9102 Adhesive
15. DOWSIL™ SE 9120 Adhesive
16. DOWSIL™ SE 9120 S Adhesive
17. DOWSIL™ SE 9152 HT Adhesive
18. DOWSIL™ SE 9150 Adhesive
19. DOWSIL™ SE 9168 RTV Adhesive
20. DOWSIL™ SE 9186 Adhesive
21. DOWSIL™ SE 9186 Sealant
22. DOWSIL™ SE 9198 RTV Adhesive
23. DOWSIL™ Q3-1596 Heat Resistant Adhesive/Sealant
24. DOWSIL™ 93-076-2 RF Sealant
25. DOWSIL™ EA-2626 Adhesive
26. DOWSIL™ EA-3500G Fast Cure Silicone Adhesive
27. SILASTIC™ Q3-3836 Adhesive
28. DOWSIL™ 3-1595 Silicone Adhesive
29. DOWSIL™ 3-1598 HP Adhesive
30. DOWSIL™ 3-6265 Thixotropic Adhesive
31. DOWSIL™ 3-6265 HP Adhesive
32. DOWSIL™ 3-6876 Adhesive
33. DOWSIL™ 3-8012 Sealant and Adhesive
34. DOWSIL™ 866 Primerless Silicone Adhesive
35. DOWSIL™ EA-7100 Adhesive
36. DOWSIL™ Q3-6611 Adhesive
37. DOWSIL™ X3-1598 Adhesive
38. DOWSIL™ 96-083 Silicone Adhesive
39. DOWSIL™ EA-8052 Fast Low-Temp Cure Adhesive
40. DOWSIL™ EA-8060 Adhesive*
41. DOWSIL™ SE 1700 Adhesive
42. DOWSIL™ SE 1720 CV Adhesive
43. DOWSIL™ Q5-8401 Adhesive
44. SYLGARD™ 577 Primerless Silicone Adhesive
45. DOWSIL™ EA-4600 HM RTV UV Adhesive
46. DOWSIL™ HM 2600 Silicone Assembly Sealant

*Product only available in Europe
## One-part moisture cure (RTV)*

<table>
<thead>
<tr>
<th>Product name</th>
<th>Features &amp; benefits</th>
<th>Color</th>
<th>Viscosity (mPa·sec)</th>
<th>Cure system (Mixing ratio)</th>
<th>Working time</th>
<th>Cure time/conditions for adhesion</th>
<th>Specific gravity</th>
<th>Shore A</th>
<th>Shore 00</th>
<th>Tensile strength (MPa)</th>
<th>Elongation (%)</th>
<th>Durometer (Hardness)</th>
<th>Adhesion</th>
<th>Unprimed lap shear (MPa)</th>
<th>Peel strength (N/cm)</th>
<th>Dielectric strength (kV/mm)</th>
<th>Agency listing**</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOWSIL™ 3145 RTV Mil-A-46146 Adhesive/Sealant</td>
<td>Very high tensile strength and elongation; Proven performance and an aerospace standard for the most demanding applications</td>
<td>Clear</td>
<td>Non-flowing</td>
<td>Non-corrosive moisture cure</td>
<td>70</td>
<td>3-7 days @ 25°C</td>
<td>1.10</td>
<td>50</td>
<td>6</td>
<td>700</td>
<td>19</td>
<td>3.5 (AI) 180 (Al)</td>
<td>19</td>
<td>Mil-A-46146, Group II, Type I; UL 94 HB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOWSIL™ 3165 Fast Tack RTV Adhesive Sealant</td>
<td>Enhanced thermal stability compared to clear version</td>
<td>Gray</td>
<td>Non-flowing</td>
<td>Non-corrosive moisture cure</td>
<td>80</td>
<td>3-7 days @ 25°C</td>
<td>1.12</td>
<td>50</td>
<td>7</td>
<td>700</td>
<td>19</td>
<td>3.5 (AI) 180 (Al)</td>
<td>19</td>
<td>Mil-A-46146, Group II/III, Type 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOWSIL™ 6-1104 CV Sealant</td>
<td>Fast, tack-free time, with good green strength</td>
<td>Gray</td>
<td>Non-flowing</td>
<td>Non-corrosive moisture cure</td>
<td>5</td>
<td>3-7 days @ 25°C</td>
<td>1.35</td>
<td>35</td>
<td>1</td>
<td>175</td>
<td>20</td>
<td>1.5 (AI) 20 (Al)</td>
<td>20</td>
<td>UL 94 V-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOWSIL™ 6-1104 CV Sealant</td>
<td>High tensile tear strength and elongation; Extremely low levels of Si volatilities; Proven for space-grade applications</td>
<td>Translucent</td>
<td>Non-flowing</td>
<td>Non-corrosive moisture cure</td>
<td>65</td>
<td>3-7 days @ 25°C</td>
<td>1.10</td>
<td>45</td>
<td>6.7</td>
<td>700</td>
<td>21</td>
<td>1.5 (AI) 20 (Al)</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*One-part moisture cure adhesives are generally cured at room temperature and in an environment of 30 to 80 percent relative humidity. Greater than 90 percent of full physical properties should be attained within 24 to 72 hours and varies according to product. These adhesives are not typically used in highly confined spaces or where a deep section cure is required. They cure from the exposed surface inward at a rate of about 6 mm per 7 days. Cure progresses from the outer exposed surface and is dependent on the moisture in the air. Mild heat below 60°C may be used to increase through-put by accelerating the cure.

**Visit UL.com for specific details.
### One-part moisture cure (RTV)* (continued)

<table>
<thead>
<tr>
<th>Product name</th>
<th>Features &amp; benefits</th>
<th>Color</th>
<th>Viscosity (mPa•s)</th>
<th>Cure system (Mixing ratio)</th>
<th>Working time</th>
<th>Cure time/conditions for adhesion</th>
<th>Durometer (Hardness)</th>
<th>Adhesion</th>
<th>Dielectric strength (kV/mm)</th>
<th>Agency listing**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOWSIL™ 730 F3 Solvent Resistant Sealant</strong></td>
<td>An aerospace proven fluorosilicone that retains its properties under exposure to fuels, oils, and solvents</td>
<td>White</td>
<td>Non-flowing</td>
<td>Acetoxy cure</td>
<td>10 —</td>
<td>3-7 days @ 25°C</td>
<td>1.44</td>
<td>40 —</td>
<td>3.3</td>
<td>225 —</td>
</tr>
<tr>
<td><strong>DOWSIL™ 732 Multi-Purpose Sealant</strong></td>
<td>A well established silicone that cures to a tough, flexible rubber; FDA and aerospace approved</td>
<td>White, black, clear, aluminum</td>
<td>Non-flowing</td>
<td>Acetoxy cure</td>
<td>15 —</td>
<td>3-7 days @ 25°C</td>
<td>1.03</td>
<td>30 —</td>
<td>2.0</td>
<td>525 —</td>
</tr>
</tbody>
</table>

**DOWSIL™ 738 Electrical Sealant**

A proven silicone sealant for use around electrical and electronic application

- **Color**: White
- **Viscosity**: Non-flowing
- **Cure System**: Non-corrosive moisture cure
- **Cure Time/Conditions for Adhesion**: 90 — 3-7 days @ 25°C
- **Durometer (Hardness)**: 1.04
- **Adhesion**: 35 — 2.7
- **Elongation (%)**: 500 — 40 (A)
- **Dielectric Strength (kV/mm)**: 20 (AI)
- **Agency Listing**: UL 94 V-1

**DOWSIL™ 739 Plastic Adhesive**

An industry standard for bonding to many plastics

- **Color**: Black, white, gray
- **Viscosity**: Non-flowing
- **Cure System**: Non-corrosive moisture cure
- **Cure Time/Conditions for Adhesion**: 75 — 3-7 days @ 25°C
- **Durometer (Hardness)**: 1.40
- **Adhesion**: 25 — 1.5
- **Elongation (%)**: 500 — 0.7 (A)
- **Dielectric Strength (kV/mm)**: — 25
- **Agency Listing**: UL 94 V-1

**DOWSIL™ 744 RTV Adhesive Sealant**

Electronic grade with high adhesion to many metals and plastics

- **Color**: White
- **Viscosity**: Non-flowing
- **Cure System**: Non-corrosive moisture cure
- **Cure Time/Conditions for Adhesion**: 40 — 3-7 days @ 25°C
- **Durometer (Hardness)**: 1.43
- **Adhesion**: 35 — 2.5
- **Elongation (%)**: 600 — 1.5
- **Dielectric Strength (kV/mm)**: — 16
- **Agency Listing**: UL 94 HB

**DOWSIL™ 7091 Adhesive**

Automotive grade; Excellent adhesion to many substrates; Used as a Formed-in-Place (FIPG) material

- **Color**: Black, white, gray
- **Viscosity**: Non-flowing
- **Cure System**: Non-corrosive moisture cure
- **Cure Time/Conditions for Adhesion**: 28 — 3-7 days @ 25°C
- **Durometer (Hardness)**: 1.43
- **Adhesion**: 30 — 2.5
- **Elongation (%)**: 680 — 1.5
- **Dielectric Strength (kV/mm)**: — 16
- **Agency Listing**: UL 94 V-1

**DOWSIL™ 7092 High Green Strength Adhesive and Sealant**

Provides improved immediate green strength — saves time as no buffer time for strength build-up required

- **Color**: Black, white
- **Viscosity**: Non-flowing
- **Cure System**: Non-corrosive moisture cure
- **Cure Time/Conditions for Adhesion**: 30 — 3-7 days @ 25°C
- **Durometer (Hardness)**: 1.58
- **Adhesion**: 50 — 2.0
- **Elongation (%)**: 425 — 1.5 (Steel, Al, PC, PA, PBT, PP, PMMA, ABS)
- **Dielectric Strength (kV/mm)**: — 17
- **Agency Listing**: UL 94 V-1

**DOWSIL™ 7093 Adhesive Sealant**

Extra low modulus for high movement capability

- **Color**: White, black, gray
- **Viscosity**: Non-flowing
- **Cure System**: Non-corrosive moisture cure
- **Cure Time/Conditions for Adhesion**: 30 — 3-7 days @ 25°C
- **Durometer (Hardness)**: 1.50
- **Adhesion**: 30 — 2.0
- **Elongation (%)**: 750 — 100% CF (Al, glass)
- **Dielectric Strength (kV/mm)**: — 13

**DOWSIL™ 7094 Flowable Sealant**

Flowable and self-leveling

- **Color**: Black, white
- **Viscosity**: 33,000
- **Cure System**: Non-corrosive moisture cure
- **Cure Time/Conditions for Adhesion**: 40 — 3-7 days @ 25°C
- **Durometer (Hardness)**: 1.30
- **Adhesion**: 20 — 1.2
- **Elongation (%)**: 400 — 0.8 (Glass)
- **Dielectric Strength (kV/mm)**: — —
- **Agency Listing**: UL 94 HB

**DOWSIL™ EA-9900 Sealant**

High green strength; Fast assembly with improved UL flame resistance

- **Color**: White
- **Viscosity**: Non-flowing
- **Cure System**: Non-corrosive moisture cure
- **Cure Time/Conditions for Adhesion**: 20 — 3-7 days @ 25°C
- **Durometer (Hardness)**: 1.52
- **Adhesion**: 50 — 2.0
- **Elongation (%)**: 400 — 1.5 (Al, PC, PMMA, glass)
- **Dielectric Strength (kV/mm)**: — 17
- **Agency Listing**: UL 94 V-1

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*One-part moisture cure adhesives are generally cured at room temperature and in an environment of 30 to 80 percent relative humidity. Greater than 90 percent of full physical properties should be attained within 24 to 72 hours and varies according to product. These adhesives are not typically used in highly confined spaces or where a deep section cure is required. They cure from the exposed surface inward at a rate of about 6 mm per 7 days. Cure progresses from the outer exposed surface and is dependent on the moisture in the air. Mild heat below 60°C may be used to increase through-put by accelerating the cure.

**Visit UL.com for specific details.**

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**Note:**

- **Cure time/conditions for adhesion** refers to the time it takes for the adhesive to reach a specified condition after application. This can vary depending on the specific adhesive and the conditions under which it is used.
- **Durometer (Hardness)**: A measure of the hardness of the adhesive.
- **Adhesion**: The ability of the adhesive to bond to a surface.
- **Dielectric strength**: A measure of the ability of the adhesive to withstand electrical stress.
- **Agency Listing**: UL (Underwriters Laboratories) listings are used to indicate that the product meets certain safety standards.
| Product name | Features & benefits | Color | Viscosity (mPa·sec) | Cure system (Mixing ratio) | Working time | Cure time/conditions for adhesion | Durometer (Hardness) | Tensile strength (MPa) | Elongation (%) | Agency listing** |
|--------------|---------------------|-------|---------------------|---------------------------|--------------|----------------------------------|---------------------|----------------------|-------------------|----------------|------------------|
| DOWSIL™ SE 9100 Adhesive | Repairable adhesive with controlled silicone volatility | Black | 45,000 | Non-corrosive moisture cure | 10 – NA | 1.05 25 – 2.5 400 0.5 (Glass) – – – |
| DOWSIL™ SE 9120 Adhesive | Highly flowable with controlled silicone volatility | Clear | 6,500 | Non-corrosive moisture cure | 10 – 3-7 days @ 25°C | 1.02 25 – 1.5 375 – – 23 – |
| DOWSIL™ SE 9120 S Adhesive | White repairable version of DOWSIL™ SE 9120 Adhesive | White | 7,000 | Non-corrosive moisture cure | 10 – 3-7 days @ 25°C | 1.03 20 – 1.5 400 – – 23 – |
| DOWSIL™ SE 9152 HT Adhesive | Flowable with heat resistance for sustained 275°C exposure | Reddish-brown | 10,000 | Non-corrosive moisture cure | 20 – 3-7 days @ 25°C | 1.05 25 – 2 300 5.5 (Glass) – 25 – |
| DOWSIL™ SE 9160 Adhesive | Repairable, hybrid (UV cure with secondary moisture cure) for faster in-line processing | Bluish | 20,000 | UV cure with secondary moisture cure | 30 – 3-7 days @ 25°C | 1.04 35 – 3 250 0.5 (Glass) – – – |
| DOWSIL™ SE 9168 RTV Adhesive | Controlled silicone volatility with top UL flame resistance | Gray | Non-flowing | Non-corrosive moisture cure | 5 – 3-7 days @ 25°C | 1.25 40 – 3.5 375 1.5 (Glass) – 26 UL 94 V-0 |
| DOWSIL™ SE 9185 Adhesive | Non-flowing; High elongation for added stress relief, with controlled silicone volatility | Translucent/white | Non-flowing | Non-corrosive moisture cure | 10 – 3-7 days @ 25°C | 1.04 25 – 3.0 500 1 (Glass) – 22 – |
| DOWSIL™ SE 9186 Sealant Adhesive | Self-leveling with controlled silicone volatility | Translucent/white | 65,000 | Non-corrosive moisture cure | 10 – 3-7 days @ 25°C | 1.03 20 – 2.5 550 1 (Glass) – 23 – |
| DOWSIL™ SE 9188 RTV Adhesive | Lower modulus for improved stress relief, with controlled silicone volatility | Gray | Non-flowing | Non-corrosive moisture cure | 10 – 3-7 days @ 25°C | 1.29 30 – 3.0 400 1 (Glass) – 30 UL 94 V-0 |
| DOWSIL™ Q3-1566 Heat Resistant Adhesive/Sealant | High temperature resistant, with broad adhesion to many substrates | Black | Non-flowing | Acetoxy cure | 5 – 3-7 days @ 25°C | 1.06 45 – 3.5 350 1.9 (Steel) – – – |

*One-part moisture cure adhesives are generally cured at room temperature and in an environment of 30 to 80 percent relative humidity. Greater than 90 percent of full physical properties should be attained within 24 to 72 hours and varies according to product. These adhesives are not typically used in highly confined spaces or where a deep section cure is required. They cure from the exposed surface inward at a rate of about 6 mm per 7 days. Cure progresses from the outer exposed surface and is dependent on the moisture in the air. Mild heat below 60°C may be used to increase throughput by accelerating the cure.

**Visit UL.com for specific details.
# Two-part condensation cure (RTV)

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<tr>
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<th>Features &amp; benefits</th>
<th>Color</th>
<th>Viscosity (mPa·sec)</th>
<th>Cure system (Mixing ratio)</th>
<th>Working time</th>
<th>Cure time/conditions for adhesion</th>
<th>Specific gravity</th>
<th>Durometer (Hardness)</th>
<th>Tensile strength (MPa)</th>
<th>Elongation (%)</th>
<th>Adhesion</th>
<th>Unprimed lap shear (MPa)</th>
<th>Peel strength (N/cm)</th>
<th>Dielectric strength (kV/mm)</th>
<th>Agency listing**</th>
</tr>
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<tbody>
<tr>
<td>DOWSIL™ 93-076-2 RF Sealant</td>
<td>Aero-space recognized, high strength silicone adhesive</td>
<td>Gray/turquoise</td>
<td>Non-flowing</td>
<td>Moisture cure (10:1)</td>
<td>120</td>
<td>23 hrs @ 25°C</td>
<td>1.13</td>
<td>50</td>
<td>5.5</td>
<td>425</td>
<td>133</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOWSIL™ EA-2626 Adhesive</td>
<td>Automotive-grade adhesive with UV and heat resistance that has fast, in-depth cure</td>
<td>White, gray, special black</td>
<td>205,000</td>
<td>Neutral cure (6:1)</td>
<td>10</td>
<td>24 hrs @ 25°C</td>
<td>1.33</td>
<td>45</td>
<td>2.5</td>
<td>275</td>
<td>100% CF</td>
<td></td>
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</tr>
<tr>
<td>DOWSIL™ EA 3500G Fast Cure silicone Adhesive</td>
<td>Fast, room-temperature cure with good adhesion to metals, glass, and plastic</td>
<td>White</td>
<td>119,000</td>
<td>Moisture cure (10:1)</td>
<td>5</td>
<td>3-7 days @ 25°C</td>
<td>1.36</td>
<td>55</td>
<td>1.5</td>
<td>75</td>
<td>1.5 (Al, PBT)</td>
<td></td>
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<tr>
<td>SILASTIC™ Q3-3636 Adhesive</td>
<td>Automotive-grade adhesive with reduced weight loss (fogging) at high operating temperatures; Not humidity-cure sensitive</td>
<td>Gray, black, special black</td>
<td>200,000</td>
<td>Moisture cure (6:1)</td>
<td>15</td>
<td>25 hrs @ 25°C</td>
<td>1.3</td>
<td>35</td>
<td>2</td>
<td>350</td>
<td>100% CF</td>
<td></td>
<td></td>
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</tbody>
</table>

**Visit UL.com for specific details.
| Product name | Features & benefits | Color | Viscosity (mPa.s) | Cure system (Mixing ratio) | Working time | Cure time/conditions for adhesion | Durometer (Hardness) | Shore A | Shore 00 | Tensile strength (MPa) | Elongation (%) | Adhesion | Unprimed lap shear (MPa) | Peel strength (N/cm) | Dielectric strength (kV/mm) | Agency listing
<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>DOWSIL™ 3-1595 Silicone Adhesive</td>
<td>High elongation adhesive with a very low modulus for added stress relief; UV indicator for inspection</td>
<td>Gray</td>
<td>650,000</td>
<td>Addition cure</td>
<td>1 hr @ 125°C 30 min @ 150°C</td>
<td>1.06</td>
<td>60</td>
<td>1.5</td>
<td>800</td>
<td>1.5 (Al)</td>
<td>–</td>
<td>18</td>
<td>–</td>
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<tr>
<td>DOWSIL™ 3-1598 HP Adhesive</td>
<td>Version of DOWSIL™ X3-1598 Adhesive with extra low void formation after cure for sensitive substrates</td>
<td>Black</td>
<td>85,000</td>
<td>Addition cure</td>
<td>2.5 hrs @ 100°C 25 min @ 125°C 10 min @ 150°C</td>
<td>1.34</td>
<td>70</td>
<td>6</td>
<td>275</td>
<td>5.5 (Al)</td>
<td>–</td>
<td>24 UL 94 V-0</td>
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<td></td>
</tr>
<tr>
<td>DOWSIL™ 3-6265 Thixotropic Adhesive</td>
<td>Thixotropic version of DOWSIL™ 3-6265 Adhesive</td>
<td>Black</td>
<td>1,000,000</td>
<td>Addition cure</td>
<td>1 hr @ 125°C 30 min @ 150°C</td>
<td>1.34</td>
<td>60</td>
<td>5</td>
<td>175</td>
<td>4 (Al)</td>
<td>–</td>
<td>21</td>
<td>–</td>
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</tr>
<tr>
<td>DOWSIL™ 3-6265 HP Adhesive</td>
<td>Version of DOWSIL™ 3-6265 Adhesive with extra low void formation after cure for sensitive substrates</td>
<td>Black</td>
<td>1,080,000</td>
<td>Addition cure</td>
<td>2.5 hrs @ 100°C 25 min @ 125°C 10 min @ 150°C</td>
<td>1.34</td>
<td>50</td>
<td>6</td>
<td>275</td>
<td>5.5 (Al)</td>
<td>–</td>
<td>21 UL 94 V-0</td>
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<tr>
<td>DOWSIL™ 3-6876 Adhesive</td>
<td>Lower viscosity version of DOWSIL™ Q3-6611 Adhesive</td>
<td>Black</td>
<td>40,000</td>
<td>Addition cure</td>
<td>4 hrs @ 125°C</td>
<td>1.28</td>
<td>25</td>
<td>3.5</td>
<td>350</td>
<td>2.5 (Al)</td>
<td>–</td>
<td>14</td>
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</tr>
<tr>
<td>DOWSIL™ 4-8012 Sealant and Adhesive</td>
<td>Aerospace recognized; Thixotropic non-corrosive adhesive with enhanced fuel and solvent resistance</td>
<td>Dark gray</td>
<td>Non-flowing</td>
<td>Addition cure</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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</tr>
<tr>
<td>DOWSIL™ 866 Primerless Silicone Adhesive</td>
<td>Automotive established; Flowable; High strength adhesive</td>
<td>Gray</td>
<td>50,000</td>
<td>Addition cure</td>
<td>1 hr @ 125°C 30 min @ 150°C</td>
<td>1.29</td>
<td>55</td>
<td>6.5</td>
<td>200</td>
<td>5.5 (Al)</td>
<td>–</td>
<td>20</td>
<td>–</td>
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<tr>
<td>DOWSIL™ EA-7100 Adhesive</td>
<td>Fast cure at lower temperatures; Adhesion to a wide variety of substrates that forms simultaneously with the cure; Less sensitive to contamination and cleaning</td>
<td>Dark gray</td>
<td>270,000</td>
<td>Addition cure</td>
<td>15 min @ 100°C</td>
<td>1.09</td>
<td>40</td>
<td>3.5</td>
<td>250</td>
<td>3 (Al)</td>
<td>20</td>
<td>17 UL 94 HB</td>
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<tr>
<td>DOWSIL™ Q3-6611 Adhesive</td>
<td>Industry standard; Flowable; High tensile strength adhesive</td>
<td>Black</td>
<td>80,000</td>
<td>Addition cure</td>
<td>3 hrs @ 100°C 1 hr @ 125°C 30 min @ 150°C</td>
<td>1.31</td>
<td>55</td>
<td>6</td>
<td>225</td>
<td>5.5 (Al)</td>
<td>–</td>
<td>13 UL 94 V-0</td>
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</tr>
<tr>
<td>DOWSIL™ X3-1598 Adhesive</td>
<td>Flowable; Automotive industry standard adhesive with high strength; UV indicator for inspection</td>
<td>Black</td>
<td>75,000</td>
<td>Addition cure</td>
<td>1 hr @ 125°C 30 min @ 150°C</td>
<td>1.32</td>
<td>60</td>
<td>5.5</td>
<td>225</td>
<td>5.5 (Al)</td>
<td>–</td>
<td>22</td>
<td>–</td>
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</table>

*Visit UL.com for specific details.
## Two-part heat cure and one-part hot melt moisture cure

<table>
<thead>
<tr>
<th>Product name</th>
<th>Features &amp; benefits</th>
<th>Color</th>
<th>Viscosity (mPa.s)</th>
<th>Cure system (Mixing ratio)</th>
<th>Working time</th>
<th>Cure time/conditions for adhesion</th>
<th>Specific gravity</th>
<th>Durometer (Hardness)</th>
<th>Tensile strength (MPa)</th>
<th>Elongation (%)</th>
<th>Adhesion</th>
<th>Agency listing**</th>
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<tbody>
<tr>
<td><strong>Two-part heat cure</strong></td>
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<tr>
<td>DOWSIL™ 96-083 Silicone Adhesive</td>
<td>Aerospace grade; High strength, very flowable adhesive</td>
<td>Translucent</td>
<td>11,000 (mixed)</td>
<td>Addition cure (10:1)</td>
<td>—</td>
<td>—</td>
<td>30 min @ 150°C</td>
<td>1.08</td>
<td>55</td>
<td>6</td>
<td>125</td>
<td>5 (Al)</td>
</tr>
<tr>
<td>DOWSIL™ EA-6052 Fast Low-Temp Cure Adhesive</td>
<td>Fast curing version of DOWSIL™ 3-1598 HP Adhesive</td>
<td>Black</td>
<td>43,500 (mixed)</td>
<td>Addition cure (1:1)</td>
<td>—</td>
<td>6</td>
<td>60 min @ 60°C</td>
<td>1.24</td>
<td>50</td>
<td>3.0</td>
<td>175</td>
<td>5 (Al)</td>
</tr>
<tr>
<td>DOWSIL™ EA-6060 Adhesive**</td>
<td>Fast, low-temperature cure adhesive with a UV indicator for inspection</td>
<td>Black/white</td>
<td>115,000 Thixo</td>
<td>Addition cure (1:1)</td>
<td>—</td>
<td>1</td>
<td>30 min @ 80°C</td>
<td>1.25</td>
<td>40</td>
<td>3.0</td>
<td>300</td>
<td>2 (Al)</td>
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<tr>
<td>DOWSIL™ SE 1700 Adhesive</td>
<td>Non-flowing; Heat cure silicone adhesive with very high strength</td>
<td>Clear</td>
<td>650,000 (mixed)</td>
<td>Addition cure (10:1)</td>
<td>—</td>
<td>8</td>
<td>30 min @ 150°C</td>
<td>1.11</td>
<td>45</td>
<td>7.5</td>
<td>425</td>
<td>2.5 (Al)</td>
</tr>
<tr>
<td>DOWSIL™ SE 1720 CV Adhesive</td>
<td>Fast, low-temperature cure, flowable adhesive with controlled silicone volatility</td>
<td>White</td>
<td>550,000 (mixed)</td>
<td>Addition cure (10:1)</td>
<td>—</td>
<td>8</td>
<td>30 min @ 150°C</td>
<td>1.13</td>
<td>45</td>
<td>7.5</td>
<td>400</td>
<td>2.5 (Al)</td>
</tr>
<tr>
<td>DOWSIL™ QS-8401 Adhesive</td>
<td>Long working time after mixing; Version of DOWSIL™ 866 Adhesive</td>
<td>Dark gray</td>
<td>70,000 (mixed)</td>
<td>Addition cure (1:1)</td>
<td>—</td>
<td>6</td>
<td>30 min @ 70°C</td>
<td>1.06</td>
<td>30</td>
<td>3.0</td>
<td>375</td>
<td>1 (Al)</td>
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<tr>
<td>SYLGARD™ 577 Primerless Silicone Adhesive</td>
<td>Flowable adhesive with high strength and a long working time after mixing</td>
<td>Gray</td>
<td>110,000 (mixed)</td>
<td>Addition cure (10:1)</td>
<td>—</td>
<td>22</td>
<td>1 hr @ 125°C</td>
<td>1.29</td>
<td>60</td>
<td>6.5</td>
<td>225</td>
<td>6 (Al)</td>
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<tr>
<td><strong>One-part hot melt moisture cure</strong></td>
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<tr>
<td>DOWSIL™ EA-4600 HM RTV UV Adhesive</td>
<td>A tough, electronic-grade silicone adhesive that adheres as soon as it cools to nearly all surfaces; UV indicator for inspection</td>
<td>Black</td>
<td>60,000 @ 120°C</td>
<td>Moisture cure</td>
<td>—</td>
<td>24</td>
<td>—</td>
<td>1.08</td>
<td>55</td>
<td>4.5</td>
<td>1,000</td>
<td>1.5 (PC)</td>
</tr>
<tr>
<td>DOWSIL™ HM 2600 Silicone Assembly Sealant</td>
<td>A tough, clear silicone adhesive that delivers adhesion as soon as it cools to nearly all surfaces; Industrial grade</td>
<td>Clear</td>
<td>70,000 @ 120°C</td>
<td>Moisture cure</td>
<td>15</td>
<td>24</td>
<td>—</td>
<td>1.08</td>
<td>60</td>
<td>4.5</td>
<td>1,000</td>
<td>1.5 (PC)</td>
</tr>
</tbody>
</table>

*Visit UL.com for specific details

**Product only available in Europe
Primers and adhesion promoters

For maximum adhesion, DOWSIL™ primer is recommended. After solvent-cleaning, apply a thin coat of DOWSIL™ primer in a very light, even coat by wiping, dipping, or spraying. Wipe off excess material to avoid overapplication, which generally appears as a white, chalky surface. When dip or spray-coating, diluting by a factor of two to four with additional solvent may avoid excessive buildup.

Primer cure

At normal room temperatures and 50% relative humidity conditions, allow the primer to air-dry from five to 30 minutes. Low-humidity and/or low-temperature conditions require longer cure times. Mild heat acceleration of the cure rate may be possible, but temperatures above 140°F (60°C) are not recommended. During application, the carrier solvent typically evaporates quickly, allowing the active ingredients to begin to react with atmospheric moisture and bonding surfaces. For optimal bonding, different cure times may be required for different temperature and humidity conditions; determine the best cure schedule and conditions for your application. Apply the desired silicone sealant after the primer, prime coat, or adhesion promoter has fully cured.

Sealant application

Apply DOWSIL™ adhesives/sealants to one of the prepared surfaces, then quickly cover with the other substrate to be bonded. On exposure to moisture, the freshly applied material will “skin over” in about five to ten minutes (depending on the product) at room temperature and 50% relative humidity.

Tool the sealant to coat, or wet the substrate surface for maximum bonding. This is typically done by properly filling the joint first, then dry-tooling the sealant by pressing and pulling a round-tipped spatula, or similar tool, across the sealant surface. This step forces sealant into joint surfaces, and helps remove air pockets or voids at the bond line. Tooling should be completed before the skin forms.

Keeping the primed surface clean may allow application of the silicone elastomer to be delayed – but in some cases, if too much time elapses, lower adhesion can result. Users are encouraged to determine the optimal cure conditions for their specific applications, and the effects of any hold times imposed between applications of the primer and sealant. In some cases, it may be recommended to reprime surfaces if eight to 24 hours elapse before the silicone sealant can be applied.
## Features and applications

<table>
<thead>
<tr>
<th>Product name</th>
<th>Special features</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cleaners</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOWSIL™ OS-20</td>
<td>VOC exempt (VOC = 0 g/L); Certified as a Clean Air Solvent by the California South Coast Air Quality Management District; Easy to use; Low in toxicity; Essentially odorless; Safe on plastics and non-corrosive to metals; Ideal for diluting and tailoring the viscosity of silicones</td>
<td>Cleaning plastics, metals, and other surfaces, or preparing these surfaces for painting, bonding, or sealing</td>
</tr>
<tr>
<td>DOWSIL™ DS-1000 Aqueous Silicone Cleaner</td>
<td>Cleaner for use on uncured silicone; Effectively emulsifies silicone oils, greases, and uncured elastomers; Effective degreaser on a wide range of applications; Aqueous solution; Complies with EU detergent regulation on biodegradability of surfactants; Nonflammable</td>
<td>Cleaning surfaces, equipment, and manufacturing units contaminated with nonsubstantive, uncured silicone residues</td>
</tr>
<tr>
<td>DOWSIL™ DS-2025 Silicone Cleaning Solvent</td>
<td>Cleaner for use on cured silicone; Rapid digestion of cured silicone; Leaves silicone-free surface; Nonflammable; High flash point; Does not contain aromatic solvent; Nonhalogenated solvent; Low viscosity; Multiple use and recyclable</td>
<td>Cleaning surfaces, equipment, and manufacturing units contaminated with substantive, cured silicone residues</td>
</tr>
<tr>
<td><strong>Primers</strong></td>
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</tr>
<tr>
<td>DOWSIL™ PR-1200 RTV Prime Coat</td>
<td>Significantly improves the adhesion of silicone sealants to a wide variety of challenging substrates; Available in clear and red</td>
<td>Improves the adhesion of silicone sealants, coatings, and rubber to masonry, wood, granite, metals, glass, ceramics, plastics, rubbers, and coatings</td>
</tr>
<tr>
<td>DOWSIL™ PS200 Adhesion Promoter</td>
<td>Significantly improves the adhesion of silicone sealants with low VOC to a wide variety of challenging substrates; Available in clear and red</td>
<td>Improves the adhesion of silicone sealants, coatings, and rubber to masonry, wood, granite, plastics, rubbers, and coatings</td>
</tr>
<tr>
<td>DOWSIL™ 1200 OS Primer</td>
<td>Useful for both moisture-curing RTV, and heat-curing silicones; Diluted in low-molecular-weight silicone fluid; Meets many international regulations for low VOC content (including European Union); Similar to DOWSIL™ PS200 Adhesion Promoter</td>
<td>Enhances bonding/adhesion of RTV and heat-cure silicones to ceramics, glass, wood, masonry, structural plastics (including FR-4), and many metals</td>
</tr>
<tr>
<td>DOWSIL™ Primer-C OS</td>
<td>Improves adhesion of silicone sealants to many substrates, including plastics; Accelerates adhesion build of two-part structural sealants; Conforms to South Coast and Bay Air Quality Management District Regulations for Architectural Sealant Primers; User friendly with low VOC; Improves quality control processes by offering a visual confirmation of primer presence; Quick cure time; Nonstaining</td>
<td>In-shop or field use with one- and two-part DOWSIL™ sealants; Accelerating adhesion to coated aluminum substrates, such as polyvinylidene fluoride (PVDF), or Kynar based paint</td>
</tr>
</tbody>
</table>
Learn more

We bring more than just an industry-leading portfolio of advanced silicone-based materials. As your dedicated innovation leader, we bring proven process and application expertise, a network of technical experts, a reliable global supply base, and world-class customer service.

To find out how we can support your applications, visit consumer.dow.com/pcb.