Technical Data Sheet

DOWSIL™ EA-9189 RTV Adhesive

One-part moisture cure silicone adhesive

Features & Benefits

- Ease to use - no mixing, no heating, no exothermic heat during cure, no added solvents
- Neutral cure
- Excellent unprimed adhesion to many substrates
- Broad temperature range performance from -45 to +200°C
- Fast cure

Applications

- Sensitive PCB system devices requiring very low volatiles in a higher durometer sealant/adhesive.
- Sealant/adhesive used in sensitive PCB system devices requiring moderate thermal management performance.

Typical Properties

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

Property	Unit	Result
As supplied		
Appearance (color)		White
Specific gravity at 25°C		1.78
Tack free time (25°C 50% RH)	min	4–7
As cured (for 7 days at 25°C 55% RH)		
Tensile strength	MPa (psi)	3.6 (525)
Elongation	%	63
Hardness	Shore A	60
Adhesion strength (lap shear)[1]	MPa (psi)	1.5 (218)
Thermal conductivity (cured)	W/m K	0.8
Volume resistivity	ohm-cm	1 x 10^{15}
Dielectric strength	kV/mm	28
Volatile content (Me2, D3-D10)	ppm	< 100
Extrusion rate	g/min Pa-sec	594 150

1. Tested on glass substrate after 7 days cure at 25°C 55% RH.

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Description

DOWSIL™ EA-9189 RTV Adhesive is a one-part neutral cure material. It is designed especially for the use in the manufacture of electrical and PCB system assemblies. It cures to a tough rubbery solid when exposed to moisture in the air.

How to Use

Cleaning the Substrate
Surfaces to be adhered or sealed should be free of dirt, oil, and other contaminants. All surfaces must be clean and dry.

Applying the Sealant
DOWSIL™ EA-9189 RTV Adhesive should be applied in a continuous, uniform thickness on the prepared surface. On exposure to moisture in the air, the surface of DOWSIL™ EA-9189 RTV Adhesive will skin over within 10 minutes at room temperature and 50 percent relative humidity.

Curing
Curing continues inward from the surface.

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.

Usable Life and Storage

Storage conditions and shelf life ("Use By" date) are indicated on the product label.

Packaging Information

Multiple packaging sizes are available for this product.

Limitations

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 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.

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Customer Notice

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Tell us about your performance, design, and manufacturing challenges. Let us put our silicon-based materials expertise, application knowledge, and processing experience to work for you.

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To discuss how we could work together to meet your specific needs, go to **dow.com** for a contact close to your location. Dow has customer service teams, science and technology centers, application support teams, sales offices, and manufacturing sites around the globe.

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