

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	594	
	Pa-sec	150	

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

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.

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.

How Can We Help You Today?

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.

For more information about our materials and capabilities, visit dow.com.

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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