

PC® RTV 450 SILICONE ADHESIVE

Product Datasheet

1. Description and Area of Application

PC® HI-TEMP RTV Silicone Adhesive is a one-part, neutral cure, silicone adhesive formulated for use at high temperatures. It cures to an elastomeric solid at room temperature.

It is particularly suited for use in conjunction with FOAMGLAS® insulation systems that require adhering or sealing FOAMGLAS® insulation to FOAMGLAS® insulation or adhering insulation to hot surfaces.

2. Field Application

Always read and understand information contained within product datasheets and safety datasheets before attempting to use this product. If you have questions regarding fitness of use of this product for a particular application, consult Pittsburgh Corning LLC.

Substrate Preparation

All surfaces should be dry and free of dust, loose scale, oil, grease and frost.

Cellular Glass Application Guidelines

Use a caulking gun to apply adhesive.

DO NOT thin. Cut nozzle to 6.4 mm (1/4 inch) or desired bead size. Apply 6.4 mm (1/4 inch) diameter beads of sealant in parallel every 10 cm (4 inch) to insulation and press to the substrate using a slight rotary motion.

Five 5 cm (2 inch) diameter daubs of adhesive per insulation block may be used instead of the bead application method.

Joints less than or equal to 3 mm (1/8 inch) are desirable. Do not use this or any other sealant to fill large voids from poor fitting insulation. The mating surfaces of the insulation should be rubbed together to obtain good fit before application of sealant.

If a coating is to be applied, remove excessive sealant flush with surface.

Clean up and Disposal

Allow sealant to cure and mechanically remove from surfaces.

Discard excess sealant and containers in accordance with local, state and federal regulations.



3. Type of Delivery and Storage

- 305 ml (10.3 fl. oz.) cartridges. Twelve (12) cartridges per carton.
- Store original, unopened containers in a cool, dry area.
- Protect unopened containers from water, heat and direct sunlight.
- Consult Safety Data Sheet for additional storage and handling information.

4. Coverage

Standard application of sealant to FOAMGLAS® insulation:

- 305 ml (10.3 fl. oz.) cartridge: 880 cm² x 3 mm (136 in² x 1/8 inch) film.
- 305 ml (10.3 fl. oz.) cartridge: Will produce a bead ~ 7.3 m (~ 24 ft.) in length and ~ 6.4 mm (~ 1/4 in.) in diameter.

5. Typical Properties

PROPERTY ^A	METHOD	SI	ENGLISH
COLOR			Aluminum
DENSITY		1.04 ± 0.02 kg / L	8.7 ± 0.2 lb / gal
APPLICATION TEMPERATURE			
MATERIAL		28 ± 7 °C	82 ± 12 °F
SURFACE		-7 ± 45 °C	19 ± 81 °F
SERVICE TEMPERATURE ^B			
MAXIMUM, INTERMITTENT		232 °C	450 °F
MAXIMUM, CONTINUOUS		204 °C	400 °F
MINIMUM		-100 °C	-148 °F
TENSILE STRENGTH	ASTM D412	1.31 MPa	190
ELONGATION AT BREAK	ASTM D412		650%
DUROMETER HARDNESS	ASTM D661 (Shore A)		15
CURE TIME / RATE			
SKIN OVER		12 minutes at 25 °C (77 °F) @ 50% RH	
TACK FREE		25 minutes at 25 °C (77 °F) @ 50% RH	
RATE		3.2 mm (1/8 inch) per 30 hours	
VOLATILE ORGANIC CONTENT (VOC), MAXIMUM LESS WATER AND EXEMPT ^C		40 g / L	0.33 lb / gal
WATER VAPOR PERMEABILITY ^D	ASTM E96 (Wet Cup)	0.25 ng / Pa·s·m	0.17 perm-in
	ASTM E96 (Dry Cup)	0.22 ng / Pa·s·m	0.15 perm-in
	EN12086:1997	0.22 ng / Pa·s·m	0.15 perm-in

^A Properties are subject to change. Consult Pittsburgh Corning LLC.

^B Service temperature limits are derived from laboratory evaluation of the product. Variations in substrates, loading conditions, or other external factors may further limit service temperature. Always consult Pittsburgh Corning LLC FOAMGLAS® Insulation System Specification for suitability for use recommendations for a specific application.

^c Adhesive is certified to meet the general requirements for VOC emissions of SCAQMD Rule 1168, October 6, 2017 Adhesive and Sealant Applications, as analyzed by the methods specified in Rule 1168.

^d Material tested as cured disk.

6. Limitations

- DO NOT use in applications where solvent odor could affect food taste or flavor.
- DO NOT use in areas subject to continuous immersion.

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