

AI TECHNOLOGY INC 70 Washington Road Princeton Jct., NJ 08550 (609) 799-9388 fax (609) 799-9308 E-Mail: ait@aitechnology.com Internet: http://www.aitechnology.com

Conductive RTV Silicone Sealant/Adhesive/Coating No Corrosive By-Products

IDEAL FOR:

EMI/RFI Shielding Applications

Caulking Use Bonding Mismatched CTE Materials

DESCRIPTION:

SR8850-1 is a room temperature curable, silver coated copper filled, electrically conductive RTV silicone sealant/adhesive. It can be used as a coating if dissolved or diluted with low boiling point solvent, such as naphtha. The material has no corrosive by-products and has good adhesion properties to metals, plastics, silicones, ceramics and glass. It is useful for bonding large area substrates and components of any size.

The material is provided as a one-part electrically conductive elastomer/silicone with a compatible primer. The silicone cures when exposed to atmospheric conditions. The typical curing schedule is 24 hours at 25°C and 60% relative humidity. Using a large volume of paste requires a cure schedule of 48 hours at 25°C and 60% relative humidity.

AVAILABILITY:

The material is normally supplied in 4, 6 and 12 oz. sizes It consists of the silicone adhesive portion in a plastic dispenser cartridge with the primer in a glass container. Both heat sealed in an aluminum bag with dessicant to protect them from moisture.

APPLICATION PROCEDURES:

(1) The surface to which SR8850-1 is to be applied should be thoroughly cleaned.

(2) The primer is applied in a manner to produce a thin, uniform coating on metals.

(${\bf 3}$) Allow primer to air dry for not less than one hour and protected from contamination.

SR8850-1

TYPICAL PROPERTIES*

Electrical Resistivity (25ºC°C/ 48 hours)	10 ±10% ⁻³ ohm-cm	
Dielectric Strength (Volts/mil)	N/A	
Glass Transition Temp.(°C)	N/A	
Current Carrying Capabilities	N/A	
Lap-Shear Strength	>100 psi	
Device Push-off Strength	>100 psi	
Hardness (Type)	>30 (A)	
Cured Density (gm/cc)	3.0 ±10%	
Thermal Conductivity	10 Btu-in/hr-ft²-ºF ±10%	
	1.4 W/m-ºC ±10%	
Linear Thermal Expansion	N/A	
Coeff. (ppm/ºC)		
Maximum Continuous Operation Temp. (°C)<125°C		
Pot Life	3 hours	

Thixotropic Index

* Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is intended to be used in manufacturing and in the final product.

CURE SCHEDULES:

<u>Temperature</u>	<u>Time</u>	<u>Presure</u>
25°C	24 hr	
**25°C	48 hr	

*SR8850-1 is moisture sensitive and must be stored in the sealed package at 25°C. When opened, all portions should be sealed and stored at a lower temperature 0 to 5°C to prevent moisture for later usage. **48 hrs is required to cure a higher volume of paste used for large bead and high thickness applications,

For full curing and/or bond strength measurements, 5-7 days curing with >50% RH is recommended. Acceleration curing at high termperature in humidity chamber with more than 85%RH is possible.

SHELF LIFE:

Storage temperature

25°C

Shelf Life

*6 mo

in the sealed package

CAUTION: This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer SDS for more details.

The information contained herein is believed to be reliable. All recommendations or suggestions are made without guarantee inasmuch as conditions and methods of commercial use are beyond our control. Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is to be used in manufacturing and in the final product. Under no circumstance shall AI Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

While AI Technology owns all proprietary rights of material formulations of its products, specific usage in the manufacturing of certain products may involve patent rights of other companies.