

RTV 850

Heat Resistant Silicone Coating

Product Description **RTV 850** is a two-component heat resistant and heat curable coating. This product has a long working time at room temperature and will not completely cure until exposure to elevated temperatures.
RTV 850 is a flowable, self-leveling, which is grey in colour and can be applied to a textile by the knife over roll technique.

Key Performance Properties

- Fast cure at elevated temperature (in a range of 140 °C to 230 °C)
- No formation of cure by-products
- Non-corrosive to metals
- Good performance over a wide temperature range
- High heat resistance up to 250 °C

Typical Product Data

| Uncured Properties | RTV 850 |
|---|---------|
| Colour | grey |
| Density | 1,21 |
| Viscosity, Pa·s | 20 |
| Cured Properties (cured 10 min. at 175 °C) | |
| Hardness, Shore A | 48 |
| Tensile Strength, MPa | 5 |

The results in this table were obtained on material produced in a pilot plant configuration. Based upon our experience we expect results obtained on material produced in large-scale production to be in line with the results above, despite this, actual results might deviate to some extent from the numbers reported in the table above.

Specifications Typical product data values should not be used as specifications. Assistance and specifications are available by contacting Momentive performance materials Technical Service RTV.

Instructions for Use **Compatibility**

RTV 850 will cure in contact with most clean and dry surfaces. However, certain materials, such as butyl and chlorinated rubber, sulfur-containing materials, amines, and certain metal soap cured RTV silicone rubber compounds can cause cure inhibition. Cure inhibition is characterized by a gummy appearance of RTV 850 at the interface between the coating and the substrate to be bonded. It is recommended to do a small test on the fabric.

Surface Preparation

The performance of any polymer system is highly dependent upon proper surface preparation. In order to minimize the potential for cure inhibition, all parts should be as clean and dry as possible prior to the application of the silicone.

Bonding

RTV 850 will mechanically bond on the fabric substrate. This silicone requires a primer SS4155 to receive good adhesion on substrates.

To apply the primer, thoroughly clean the surface and let dry. Then apply a uniform film (0.01-0.02 mm) of SS4155 silicone primer and allow the primer to air-dry for one hour or more.

Curing

| Temperature | RTV 850 |
|-------------|-------------|
| 150 °C | < 8 minutes |
| 175 °C | < 4 minutes |
| 200 °C | < 2 minutes |

The actual cure time is affected by such things as cross-sectional thickness of the RTV 850, heat capacity of the overall assembly and efficiency and type of oven used (i.e. convection, infrared).

Handling and Safety

Material Safety Data Sheets are available upon request from Momentive performance materials. Similar information for solvents and other chemicals used with Momentive performance materials Products should be obtained from your suppliers. When solvents are used, proper safety precautions must be observed.

CAUTION

RTV 850 can generate flammable hydrogen gas upon contact with acidic, basic or oxidizing materials. Such contact should be avoided.

Shelf Life and Storage

The warranted shelf life from the material will be indicated by the "use before date" on the associated documents with a minimum of 4 months when stored in the unopened containers at 27 °C or less.

Availability

RTV 850 is available in 20 kg pails and in 200 kg drums.



PRINCIPAL LOCATIONS – Regional Information

| | | | |
|--|---|---|--------------------|
| North America | World Headquarters 187 Danbury Road Wilton, CT 06897, USA | T 800.295.2392 | F 607.754.7517 |
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| Europe, Middle East, Africa and India | D-51368 Leverkusen Germany | T 00.800.4321.1000 T +31.164.293.276 | F +31.164.241.750 |
| Pacific | Akasaka Park Building - 5-2-20 Akasaka Minato-ku, Tokyo 107-6112 Japan | T +81.3.5544.3100 | F +81.3.5544.3101 |

CUSTOMER SERVICE CENTERS

| | | | |
|--|---|---|--------------------|
| North America | Charleston, WV 25314, USA E cs-na.silicones@momentive.com | | |
| | • Specialty Fluids | T 800.523.5862 | F 304.746.1654 |
| | • UA, Silanes, Resins, and Specialties | T 800.334.4674 | F 304.746.1623 |
| | • RTV Products-Elastomers | T 800.332.3390 | F 304.746.1623 |
| | • Sealants and Adhesives & Construction | T 877.943.7325 | F 304.746.1654 |
| Latin America | E cs-la.silicones@momentive.com | | |
| | • Argentina & Chile | T +54.11.4862.9544 | F +54.11.4862.9544 |
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| | • Mexico & Central America | T +52.55.5899.5135 | F +52.55.5899.5138 |
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