

# SILCOOL™ TIA200R-G Thermally Conductive Silicone Rubber

## Product Description

SILCOOL TIA200R-G is a one component, heat curable silicone adhesive designed for thermally conductive application. It cures quickly upon exposure to heat and adheres well to a wide variety of substrates.

## Key Features and Typical Benefits

- Good thermal conductivity
- Fast heat-cure capabilities
- Easy to handle and apply
- Electrically insulating
- Primeless adhesion to many substrates
- Non-corrosive to metal

## Potential Applications

- Thermal Interface Material between dies and heat spreaders
- Adhesive for use between various heat sources and heat dissipation devices

## Typical Physical Properties (JIS K 6249)

UNCURED PROPERTIES (23 °C, 50%RH)		TIA200R-G
Appearance		Gray
Viscosity	Pa·s	70.0
Cure condition (120 °C)	min	30
Thixotropy		3.5
CURED PROPERTIES (30min @ 120 °C)		
Appearance		Gray rubber
Density	g/cm <sup>3</sup>	2.88
Hardness (Shore A)		85
Thermal conductivity*1	W/(m·K)	2.0
BLT	μm	30
Lap Shear Strength	MPa	3.0
UL flammability rating		UL 94 V-0
Operating temperature range	°C	-50 ~ 200
Volume resistivity	MΩm	4.8×10 <sup>6</sup>
Dielectric strength	kV/mm	20

\*1: Hot wire method

Typical properties are average data and are not to be used as or to develop product specifications.

## Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement, or recommendation to practice any invention covered by any patent without authority from the owner of the patent.

## Product Safety, Handling, and Storage

- Wear eye protection when handling uncured rubber as it can irritate eyes. In case of eye contact, immediately flush eyes well with water and contact a physician.
- Maintain adequate ventilation in the work place at all times.
- Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface of the substrate can inhibit curing. It is recommended that a preliminary test be performed to determine compatibility.
- All parts should be as clean and dry as possible prior to application.
- Store at cool temperature (0~10°C) to prevent viscosity increase. When returning to room temperature, allow the contents to return to room temperature before opening the container to avoid condensation.
- Keep out of the reach of children.

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment, if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

## Packaging

- TIA200R-G 300ML cartridge
- TIA200R-G 20OZ SEMCO

## Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular application(s).

## Contact Information

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