

# Product Data

## Thermally Conductive Silicone Rubber SilCool\* TIA200R

**TIA200R** is a one component, heat curable silicone adhesive designed for thermally conductive applications. TIA200R cures quickly upon exposure to heat, and adheres well to a wide variety of substrates.

### KEY FEATURES

- ◆ Good thermal conductivity
- ◆ Fast cure with heating
- ◆ Easy to use
- ◆ Electrically insulated
- ◆ Primeless adhesion to many substrates
- ◆ No corrosive to metal

### APPLICATIONS

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

### TYPICAL PROPERTY DATA

(JIS K 6249)

UNCURED PROPERTIES (23 °C, 50%RH)		TIA200R
Appearance		Gray
Viscosity	Pa·s	70.0
Cure condition (120 °C)	min	30
CURED PROPERTIES (30 min @ 120 °C)		
Appearance		Gray rubber
Density	g/cm <sup>3</sup>	2.88
Hardness (Shore A)		85
Lap Shear Strength	MPa	3.0
Cohesive Failure	%	100
Thermal conductivity *1	W/(m·K)	2.0
Dielectric Strength	kV/mm	20
Volume Resistivity	MΩ·m	4.8×10 <sup>6</sup>

\*1: Hot wire method    *Typical properties are average data and are not to be used as or to develop product specifications.*

### PACKAGING

1 kg can in cases of 10

## **GENERAL INSTRUCTIONS FOR USE**

- ◆ 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 the compatibility.
- ◆ All parts should be as clean and dry as possible prior to application.

## **STORAGE**

- ◆ Store at cool temperature (<5°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.

## **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**

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.

## **Limitations**

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

## **Contact Information**

For product prices, availability, or order placement, contact our customer service at [Momentive.com/CustomerService/](http://Momentive.com/CustomerService/).

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

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