

SILCOOL™ TIA227G Thermally Conductive Silicone Rubber

Product Description

SILCOOL TIA227G is a two-component, heat curable silicone rubber designed for thermally conductive potting applications. It quickly cures with exposure to heat to form an elastic, thermally conductive rubber that helps relieve stress on critical electronic components.

Key Features and Typical Benefits

- Soft, elastomeric rubber properties
- Easy to use 1:1 mixing ratio by weight or volume
- Outstanding stress relief
- Fast cure with exposure to heat
- Good thermal conductivity
- Resistance to temperature extremes
- Non-corrosive to metal

Typical Physical Properties

UNCURED PROPERTIES (23 °C, 50%RH)		TIA227G(A)	TIS227G(B)
Appearance		Light gray	Gray
Viscosity	Pa·s	10	10
Mixing ratio by weight or volume		100 :100	
Mixing viscosity (A/B)	Pa·s	10.0	
Workable life @ 23 °C	min	60	
Cure condition (70 °C)	min	30	
CURED PROPERTIES (30min @ 70 °C)			
Appearance		Gray	
Density	g/cm ³	2.8	
Hardness (Shore E)		65	
Thermal conductivity	W/(m·K)	2.6	
Volume resistivity	MΩm	2×10 ⁶	
Dielectric strength	kV/mm	18	
UL 94 flame retardancy		V-0 equivalent	

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

- Parts A and B should each be stirred before mixing together, as filler sedimentation may occur during storage.
- Deaerate the mixture to remove air entrapped during mixing.
- Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface of the substrate can inhibit curing. A sample patch should always be conducted before proceeding to determine compatibility.
- 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.

Store in a cool, dry place out of direct sunlight & 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 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 application(s).

Contact Information

Email

commercial.services@momentive.com

Telephone

Americas

+1 800 295 2392
Toll free*
+704 805 6946
Direct Number

*All American
countries

Latin America

Brazil
+55 11 4534 9650
Direct Number

Mexico
+52 55 2169 7670
Direct Number

EMEA- Europe, Middle East, Africa & India

Europe
+390510924300
Direct number

India, Middle East & Africa
+ 91 44 71212207
Direct number*

*All Middle Eastern
countries, Africa, India,
Pakistan, Bangladesh, Sri
Lanka.

ASIA PACIFIC

China
800 820 0202
Toll free
+86 21 3860 4892
Direct number

Japan
+81 3 5544 3111
Direct number

Korea
+82 2 6201 4600
Direct number

**South East Asia, Australia & New
Zealand**
+60 3 9206 1543

Direct number*

*South East Asia countries (Malaysia, Singapore, Thailand, Indonesia, Vietnam, Philippines, Cambodia, Myanmar / other countries located in Pacific region).

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260 Hudson River Road Waterford,
NY 12188 USA
momentive.com

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