

SILCOOL™ TIA216G Thermally Conductive Silicone Rubber

Description

SILCOOL TIA216G is a 2-component, thermally conductive potting material used primarily on complex thermal interface designs. Its low viscosity allows it conform to intricate shapes, and thus enable the reduction of contact interference. SILCOOL TIA216G potting material quickly cures to a soft rubber, gel consistency with exposure to heat, and retains tacky adhesion on its cured surface.

Key Features and Typical Benefits

- Good thermal conductivity
- Low viscosity
- Fast cure with exposure to heat
- Room temperature cure capability
- Easy to use 1 : 1 mix ratio by weight and volume
- Repairability
- Non-corrosiveness to metal
- UL 94V-0 Compliance (file number E56745)

Typical Properties

UNCURED PROPERTIES		TIA216G (Part A)	TIA216G (Part B)
Appearance		Gray	White
Mix ratio by weight		1 : 1	
Viscosity Part A	Pa·s	9.5	
Viscosity Part B	Pa·s	6.6	

Viscosity after mixing	mPa•s	7.8
Work life at 23 °C	Hours	2
Cure Time @ RT	Hours	6
Cure Time @ 70°C	Hours	0.5

* SilCool is a trademark of Momentive Performance Materials Inc.

CURED PROPERTIES (30 minutes @ 70°C)		
Appearance		Gray
Density (23°C)	g/cm ³	2.69
Hardness	Shore E	40
Thermal conductivity* ³	W/mK	1.6
Volume Resistivity	MΩm/ (Ω.cm)	4.0x10 ⁶ / (4x10 ¹⁴)
Dielectric strength	kV/mm	20

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

General Considerations for Use

Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface of the substrate can inhibit curing. Pre-testing of a sample patch to determine compatibility is recommended. Stir Parts A and B prior to mixing, as filler sedimentation may occur during storage.

Product Safety, Handling and Storage

Store in a cool, dry place out of direct sunlight and 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 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.

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For literature and technical assistance, visit our website at: www.momentive.com

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