

SILCOOL™ TIG3500H Thermally Conductive Silicone Compound

Description

SILCOOL TIG3500H is a silicone compound that helps provide good thermal conductivity and low thermal resistance. Its stability under high temperature conditions and electrically insulative properties make it an excellent candidate for use as a thermal interface in power electronics. SILCOOL TIG3500H is thixotropic and can be applied with screen-printing and dispensing methods. It is can be used to provide high bulk thermal conductivity while minimizing oil bleed under harsh operating conditions to help maintain its grease properties.

Key Features and Typical Benefits

- High thermal conductivity and low thermal resistance
- High volume resistivity and high dielectric strength. Electrically insulative
- Low volatile content, solvent-free formulated
- Low oil bleed, minimal weight loss at elevated temperatures

Typical Physical Properties

| Criteria | Properties | | |
|-----------------------------------|----------------------|------------|--|
| Appearance | | Gray paste | |
| Density (23°C) | g/cm ³ | 3.2 | |
| Viscosity*1 (20 rpm) | (Pas) | 300 | |
| Thermal Conductivity*2 | W/m·K | 3.5 | |
| Thermal Resistance *3 (at 40 psi) | cm ² .K/W | 0.12 | |
| Thermal Resistance *3 (at 80 psi) | cm ² .K/W | 0.10 | |

| Minimum BLT | μm | 25 | | | |
|---|-------|------------------------|--|--|--|
| Volume Resistivity | Ω·cm | 3.5 x 10 ¹² | | | |
| Dielectric Strength | kV/mm | 18 | | | |
| Volatile Siloxane (D ₄ ~D ₁₀) | ppm | <100 | | | |
| 1: HVDV #7 2: Hot wire method 3: ASTM 5470 Typical properties are average data and are not to be used as or to develop specifications. | | | | | |

Packaging

• 1kg can

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.

Contact Information

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

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