

Electrolube® PCG300

One-part, Pre-Cured, Thermally Conductive Gel

DESCRIPTION

Electrolube® PCG300 is a one-part, thermally conductive gel with a bulk thermal conductivity of 3 W/m-K. It is suitable for automatic dispensing and does not require any mixing or curing. Due to the pre-cured formula, **PCG300** provides high vibration stability and pump-out resistance. **PCG300** requires extremely low pressure to conform to the contours of the components, thus preventing unwanted stress on sensitive electronic components and solder joints.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES AND BENEFITS

- Thermal conductivity of 3 W/m-K; aids rapid heat transfer over uneven surfaces
- Very low compression force
- Suitable for a bond line thickness of 100 to 1500 um
- No vertical flow or pump-out
- Pre-cured compound; allows simple and efficient rework
- No mixing or curing required

APPROVALS

| Standard | Status |
|----------|-----------|
| RoHS | Compliant |
| REACH | Compliant |

PRODUCT INFORMATION

Packaging sizes: 30cc syringe and 330cc cartridge

TYPICAL PROPERTIES

| Category | Result | Unit | Test Method |
|------------------------------|-------------------------------|-------------------------|-------------------|
| Material Properties | | | |
| Color | Blue | - | Visual |
| Resin Base | Silicone | - | - |
| Low Shear viscosity | 600 | Pa-s | Spiral Viscometer |
| High Shear viscosity | 170 | Pa-s | Spiral Viscometer |
| Density | 3.0 | g/cc | ASTM D972 |
| Operating Temperature Range | -60 to +180 | °C | - |
| Bond Line Thickness | 100 to 1500 0.004 to 0.060 | µm inch | - |
| Flammability | Meets V-0 | | UL94 |
| Electrical Properties | | | |
| Dielectric Breakdown | 12 | kV/mm | ASTM D149 |
| Volume Resistivity | >10 ¹¹ | Ohm-m | ASTM D257 |
| Thermal Properties | | | |
| Thermal Conductivity | 3.0 | W/m-K | ASTM D5470 |
| Thermal Impedance at 0.1mm | 0.08 | °C-inch ² /W | ASTM D5470 |

APPLICATION GUIDELINES

PCG300 is developed as a thermally conductive gel. For gap filling applications the material can be dispensed either manually or via automated equipment into the desired location.

ADDITIONAL INFORMATION

Shelf Life: 60 Months

The product should be tested to ensure its suitability for the end application conditions.

SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.**

CONTACT INFORMATION

www.macdermidalpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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