

Thermoset® SG-21 Thermally Conductive Grease

Description

LORD Thermoset® SG-21 thermally conductive grease is a non-reactive, silicone material designed for applications where the heat sink may later need to be easily removed from the device.

Thermoset SG-21 grease can be used with a variety of devices including flip chip microprocessors, PPGAs, BGAs, microBGAs, DSP chips, graphic accelerator chips, and high-speed memory devices. The thixotropic character of Thermoset SG-21 grease will hold the heat sink in place until it is mechanically attached.

Features and Benefits

High Thermal Conductivity – provides thermal conductivity for applications where superior heat dissipation is required.

Thin Bondlines – achieves thin bondlines of ≤ 1 mil, minimizing the thermal pathway and maximizing heat flow.

Reworkability – easily removed with isopropyl alcohol or acetone, eliminating the use of toxic solvents.

Low Thermal Resistance – provides minimal thermal resistance due to low viscosity and good wetting.

High Reliability – provides excellent resistance to moisture and temperature cycling; low bleed.

Typical Properties*

| | |
|------------------------------------|-------------|
| Appearance | White Paste |
| Viscosity, cps @ 25°C | 1,800,000 |
| Specific Gravity | 2.3 |
| Bleed, % 24 hours @ 200°C | 0.7 |
| Weight Loss, % 24 hours @ 200°C | 0.8 |
| Thermal Conductivity, W/mK | 0.8 |

*Data is typical and not to be used for specification purposes.

LORD TECHNICAL DATA

Application

Applying – Mount syringe onto the dispensing equipment that has been thoroughly cleaned and purge grease through the system until an unbroken flow of grease is extruded. The system is now ready to begin dispensing.

Cleanup – Disposable containers and utensils are recommended when working with greases. However, when disposable materials are impractical, grease can be removed by cleaning equipment with solvents such as isopropyl alcohol or acetone. Solvent-cleaned utensils should be thoroughly dried before reuse; any remaining solvent can contaminate the next application.

Shelf Life/Storage

Shelf life is six months from date of manufacture when stored at 25°C in original, unopened container. Syringe must be maintained at 25°C in a vertical (upright) position with the dispense tip facing down. Do not store syringe on its side (horizontally).

Cautionary Information

Before using this or any LORD product, refer to the Material Safety Data Sheet (MSDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

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