LORD TECHNICAL DATA

Gelease® MG-134 Thermally Conductive Gel

Description

LORD Gelease[®] MG-134 thermally conductive gel is a cure-free, one-component, silicone interface material that exhibits the low thermal resistance properties of a grease while possessing the integrity of a gel.

Features and Benefits

No Separate Cure Required – material gels in service; no additional cure steps are necessary to achieve full cure properities.

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

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

High Reliability – provides excellent resistance to moisture and temperature cycling; resists pump-out and cracking.

Application

Applying – Before use with dispensing equipment, allow material to be warmed to room temperature (ideally 20-25°C). Thaw material by placing the syringe in a vertical (upright) position with dispense tip facing downward in an ambient environment. Consult handling instructions for specific guidelines.

Mount the syringe onto the dispensing equipment that has been thoroughly cleaned and purge material through the system until an unbroken flow of material is extruded.

Gelling – Material begins gelation process immediately upon application. Exposure to elevated temperatures will decrease gel time.

Cleanup – Clean equipment and tools prior to the material gelation with isopropyl alcohol or similar solvents in a well-ventilated area.

Typical Properties*

Before Gel

Appearance	Gray Paste
Viscosity, cps @ 25°C	
300 rpm	128,400
600 rpm	105,900
Specific Gravity	3.12
Working Life, hr @ 25°C	24
Gelled	
Thermal Conductivity**, W/mk	6-8
Coefficient of Linear Thermal Expansion, ppm/°C	178
Glass Transition Temperature (Tg), °C	-110
Storage Modulus, Pa @ 25°C by DMTA	6000

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

**Thermal conductivity measured via the sandwich method with Gelease MG-134 gel placed between nickel-coated copper and silicon.



Shelf Life/Storage

Shelf life is six months from date of manufacture when stored at -30°C in original, unopened container. Syringe must be maintained at -30°C in a vertical (upright) position with the dispense tip facing down. Do not store syringe on its side (horizontally).

This material is shipped and stored frozen. Consult handling instructions for thawing.

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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