

# **Thermal Grease 21-440**

Version TDS.21-440.V.B.2

#### Description

Thermal Grease 21-440 is grease-like thermal interface material, designed to perform low thermal resistance between high watt density chips like CPUs, GPUs, ASICS, Northbridge chipsets and heat sink. It provides outstanding reliability while remaining stable through all industry standard reliability testing.



#### **Benefits**

- Moderate Viscosity
- Non-Curing Material (No Need For Curing Oven)
- High Thermal Conductivity
- RoHS Compliant

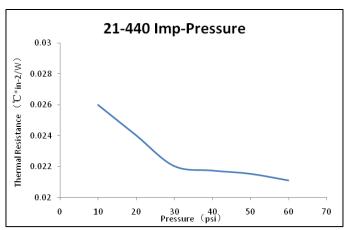
### **Applications**

- CPUs (Notebooks, PCs, Servers)
- LED Solid State Lighting
- GPUs
- Northbridge Chipsets
- ASICS Chips

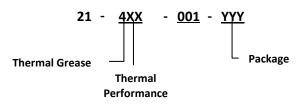
#### **Typical Properties**

Properties		21-440	Test Method
Thermal	Thermal Conductivity (W/m-K)	3.8	ASTM D5470
	Thermal Resistance @40 psi (in^2°C/W)	0.022	ASTM D5470
	Thermal Resistance @20 psi (in^2°C/W)	0.024	ASTM D5470
	Continuous Use Temp. (°C)	-40~150	JONES
Physical	Substrate	Silicone	-
	Color	Grey	Visual
	Viscosity (cP)	<200,000	Brookfield Viscometer Tespindle @ 20rpm
	Specific Gravity (g/cc)	2.4	ASTM D792
Electrical	Volume Resistivity (Ohm-cm)	>10^9	ASTM D257
Regulatory	Flammability Rating	V0	UL 94
	Self Life @25°C (Months)	6	JONES
	RoHS Compliant	YES	-

## **Thermal Resistance vs Compression**



# **Ordering Information**



**Standard Package** 

21-440-001-030M = thermal grease 21-440 30cc tube (80g) 21-440-001-600M = thermal grease 21-440 600cc can (1kg) 21-440-001-001L = thermal grease 21-440 1L can (2kg) 21-440-001-001G = thermal grease 21-440 1Gallon can (8kg)

**Storage Requirement** 

Room Temperature Between 8 to 28 degree, R.H. 50% \* Unopened Original Package

#### Declaimers

- The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the issuing date of this TDS. When using our products, no matter what type of equipment they might be used for, be sure to make a written agreement on the specifications with us in advance. The design and specifications in this TDS are subject to change without prior notice.
- Do not use the products beyond the specifications described in this TDS. This TDS explains the typical performance of the products as individual component. Before use, check and evaluate their operations when installed in your products.
- \* Install the following systems for a failsafe design to ensure safety if these products are to be used in equipment where a defect in these products may cause the loss of human life or other significant damage, such as damage to vehicles (automobile, train, vessel), traffic lights, medical equipment, aerospace equipment, electric heating appliances combustion/gas equipment, rotating equipment, and disaster/crime prevention equipment.