

## Features & Benefits

- Thermal Grease at 2.0 W/mk (Thermal Conductivity)
- Electrically isolating
- Minimized interfacial resistance
- Superior Thermal Performance
- Excellent Wet Out

## Applications

- CPU, GPU (Notebooks, Desktops, Servers)
- Custom ASICs Chips
- Industrial Electronics
- Power Electronics

## Introduction

**TCLAD TCGS** is a superior silicone based thermal grease which can help the thermal dissipation of electronic components. It can be hand applied or screen printing with this material.

**Typical properties** of grease series products is a silicone based thermal grease made from a silicone fluid with thermally conductive material and metal oxide fillers. The product offers high thermal conductivity, virtually no wide operating bleed or evaporation over temperature range.

**How to use:** Depending on storage time of the material from the date on manufacture, premixing prior to use may be required as it has 2% solvent for allowing mixing and easy applying when needed. Clean the surfaces and apply the material on the desired surfaces. Once the surface is applied by pressure with a surface the air gaps could be removed as much as possible for better heat dissipation from the heat source.

**Useable life and storage:** TCGS products are best if stored in a cool and dry / non-humid environment, especially where it is not exposed to any sunlight. Containers that have been stored longer than two months should be remixed with a clean mixer and vacuum to prevent air entrapment. Whereas the cartridge containers should be flipped upside down every two weeks to prevent the particle fillers from settling to the bottom. The shelf life can be up to 6 months when properly stored.

**Package Information:** Typical package size, cartridges: 30cc (100g), 300cc (1Kg), Containers: 1 and 100Kg. Other sizes are available upon request.

**Precautions:** Please review the technical data sheet of the material before use of the product in terms of the material characteristics to fit one's application. All values stated here are typical values.

We provide custom solutions for your applications. For further inquiries, please contact your local sales agent or directly to TCLAD sales in your region.

Item	Condition	Unit	Value	Method
General				
Color	Visual	-	Yellow/Gray	Visual
Continuous Use Temp	-	°C	-40 ~ 150	-
Viscosity (with solvent)	25°C (1rpm, no spindle)	cps	< 90,000	ASTM D2196
Density	25°C	g/cc	3.4	ASTM D792
Electrical				
Volume Resistivity	-	Ω-cm	> 1x10 <sup>13</sup>	ASTM D257
Breakdown Voltage	KV/mm	KVAC	>5	ASTM D149
Thermal				
Thermal Conductivity	-	W/m-K	2.0	ASTM D5470
Thermal Impedance	°C-cm²/W	50 psi	0.13	ASTM D5470
		100 psi	0.11	
Application				
Typical Thickness @ 50 psi		μm	30	

