

# D2000

## Two-Part Curable Thermal Grease

LiPOLY D2000 is a two-part curable thermal grease. It can be cured quickly at room temperature and high temperature without pump-out effect. It is a highly reliable material. With a thermal conductivity of 2.0 W/m\*K, has low thermal resistance. It is ideally suited for dispensing using the dispensing robot or by syringe.

### ■ FEATURES

- / Thermal conductivity: 2.0 W/m\*K
- / Cured and Re-workable thermal Grease.
- / Without Pump-out and Dry out concern.
- / Great reliability
- / Low thermal resistance and thinner Bond Line Thickness.

### ■ TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / Power supplies
- / High speed mass storage drives
- / Telecommunication hardware
- / Mobile devices
- / 5G base station & infrastructure
- / EV electric vehicle

### ■ CONFIGURATIONS

- / Cartridges: 50ml, 400ml
- / Other special and custom sizes are available upon request

### ■ DISPENSING INSTRUCTIONS

Use the disposable plastic static mixing nozzles to mix parts A and B together to the desired ratio. Liquid gap fillers can be dispensed using an automatic dispensing machine or a manual dispensing tool that can be provided by LiPOLY upon request/purchase. The disposable plastic static mixing nozzles cannot be re-used.

### ■ STORAGE

Two-part liquid gap fillers should be stored in climate-controlled environments at or below 30°C. Keep liquid gap fillers away from direct sunlight and away from high-temperature environments.

### ■ PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 30°C. (Note: The product may experience oil-powder separation after being stored for an extended period, which is a natural sedimentation phenomenon caused by the density difference between silicone oil and powder. This does not affect its functionality and can be used as normal. It is recommended to stir the product evenly before use. )

### ■ PRECAUTIONS

The two-part liquid gap filler may not cure properly if it comes into contact with certain substances, including amine, sulfur, organophosphorus compounds, and organotin compounds. Please avoid the following substances when handling: (N, P, S, Sn, Pb, Hg, Sb, Bi, As) Ensure a clean mixing container is used (e.g.: paper cup or plastic cup) before injecting the A and B parts into the mixing container. The plasticizer, wax from the cups, varnish or the epoxy from the oven may contaminate the A and B parts. You are reminded to pre-test the gap filler before using it.



## ■ PLEASE NOTE

It's recommended that the diameter of mixing tube outlet should be 3mm at least, which can solve the possible problem of poor fluidity caused by ambient temperature.

## ■ TYPICAL PROPERTIES

PROPERTY	D2000	TEST METHOD	UNIT
Color	White (A part) Gray (B part)	Visual	-
Solid content	100% (Two-part : 100:100 )	-	-
Viscosity A	95	ISO 3219	Pa.s
Viscosity B	95	ISO 3219	Pa.s
Density	2.8	ASTM D792	g/cm <sup>3</sup>
Shelf life	24 months	-	-
ROHS & REACH	Compliant	-	-
SOLID(AFTER CURE)			
Thermal conductivity	2.0	ASTM D5470	W/m*K
Thermal impedance@2mils BLT	0.042	ASTM D5470	°C-in <sup>2</sup> / W
Bond line thickness	50	-	μm
Hardness	75	ASTM D2240	Shore OO
Heat capacity	1.0	ASTM E1269	J/g*K
Volume resistivity	>10 <sup>12</sup>	ASTM D257	Ohm-m
Dielectric breakdown	14	ASTM D149	KV/mm
Working temp (long term)	-60 ~ 200	-	°C
Working temp (short term)	288	-	°C
Operating ambient temp	20 ~ 30	-	°C
CURE SCHEDULE			
Pot life @ 25°C	10~15	By LiPOLY	min
Surface dry @ 25°C	25~30	By LiPOLY	min
Cure @ 25°C	35~40	By LiPOLY	min
Cure @ 100°C	80	By LiPOLY	sec
Cure @ 120°C	30	By LiPOLY	sec