

# PK605DM

## Two-Part Fast Curing Thermal Conductive Gel

LiPOLY PK605DM is a two-part liquid gap filler, fast cured at room temperature or elevated temperature. With a thermal conductivity of 5.0 W/m\*K, PK605DM provides high thermal conductivity and low thermal impedance. It is ideally suited for dispensing using the LiPOLY dispensing robot or by syringe. Available in 50ml and 400ml cartridges.

#### Features-

- •Thermal conductivity:5.0 W/m\*K
- ·Fast curing in normal atmospheric temperature
- Flame retardant
- Great reliability
- Great sealing in low pressure

### **Typical Applications-**

- •Between CPU and heat sink
- •Between a component and heat sink
- Power supplies
- High speed mass storage drives
- Telecommunication hardware

## 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 25°C. Keep liquid gap fillers away from direct sunlight and away from high-temperature environments.

#### **Shelf Life-**

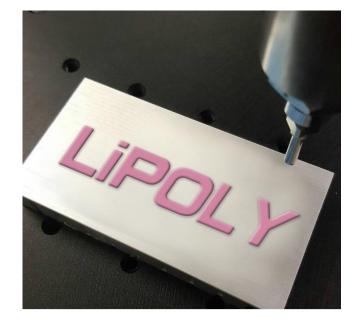
60 months unopened under standard room conditions.

#### **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.

#### Note:

All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be constructed as a quaranty of patent infringement. Copyright 2019 LiPOLY.





# PK605DM

## **Two-Part Fast Curing Thermal Conductive Gel**

**Typical Properties-**

PROPERTY	PK605DM	TEST METHOD	UNIT
Color	Red (A part)	Visual	-
	White(B part)		
Solid content	100%	-	_
	(Two-part : 1:1)		
Viscosity A	110	ISO 3219	Pa.s
Viscosity B	80	ISO 3219	Pa.s
Density	3.3	ASTM D792	g/cm <sup>3</sup>
Shelf Life	60 months	-	-
ROHS&REACH	yes	-	-
SOLID(AFTER CURE)			
Thermal Conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10mils BLT	0.09	ASTM D5470	°C-in²/ W
Thermal impedance@20mils BLT	0.17	ASTM D5470	°C-in²/ W
Thermal impedance@30mils BLT	0.25	ASTM D5470	°C-in²/ W
Hardness	85	ASTM D2240	Shore OC
Volume Resistivity	>10 <sup>12</sup>	ASTM D257	Ohm-m
Working Temp (long term)	-55 to 200°C	-	-
Operating ambient Temp	20 to 30°C	-	-
CURE SCHEDULE			
Pot Life @ 25°C	10~15	By LiPOLY	min
Surface dry @ 25°C	20~25	By LiPOLY	min
Cure @ 25°C	20~25	By LiPOLY	min
Cure @ 100°C	40	By LiPOLY	sec
Cure @ 120°C	10	By LiPOLY	sec

#### Note:

All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be constructed as a quaranty of patent infringement. Copyright 2019 LiPOLY.