

EPDM20

Non-Silicone Two-Part Thermal Conductive Adhesive

LiPOLY EPDM20 is a silicone-free two-part liquid caulking agent that does not volatilize low-molecular-weight siloxane. With high viscosity and good adhesion, it can cure quickly at room temperature or elevated temperature. With a thermal conductivity of 2.2 W/m*K, EPDM20 provides high thermal conductivity and low thermal impedance. It is ideally suited for dispensing using the dispensing robot or by syringe.

FEATURES

- / Thermal conductivity: 2.2 W/m*K
- / Can be applied with dispenser
- / Room Temperature curing or heating curing
- / Low compression stress during assembly
- / Excellent adhesion to metal & PCB

TYPICAL APPLICATION

- / Electronic components: IC \ CPU MOS \ Mother Board \ Wireless Hub Telecom Device \ Automotive electronics \ Computer \ Peripherals and High frequency magnetic inductor
- / Between any heat-generating component and a heat sink.
- / 5G base station & infrastructure
- / EV electric vehicle

CONFIGURATIONS

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

PRESERVATION

It can be preserved for 24 months under the condition of unopened and under room temperature 25°C.

PLEASE NOTE

- / It is recommended to preheat the material to 40°C for 20 minutes or 50°C for 10 minutes if ambient temperature is less than 25°C for better extrusion and mixing.
- / 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 | EPDM20 | TEST METHOD | UNIT |
|-------------------------|---------------------------------------|-------------|-------------------|
| Color | Black Gray (A part) Black (B part) | Visual | - |
| Resin base | Ероху | - | - |
| A:B | 100:100 | - | - |
| Viscosity A | 265 | ISO 3219 | Pa.s |
| Viscosity B | 252 | ISO 3219 | Pa.s |
| Thixotropic Index | 4.1 | ISO 3219 | - |
| Density | 2.7 | ASTM D792 | g/cm³ |
| Application temperature | -40~120 | - | °C |
| Surface dry | 25°C/55 min | By LiPOLY | - |
| Curing condition | 25°C/4 hrs | By LiPOLY | - |
| Hardness | 90 | ASTM D2240 | Shore A |
| Elongation at break | <1 | ISO527 | % |
| Tensile strength | 65 | ISO527 | N/cm ² |
| Lap shear to aluminum | 350 | ASTM D1002 | N/cm ² |
| Shelf life | 24 months | - | - |
| ROHS & REACH | Compliant | - | - |
| ELECTRICAL | | | |
| Dielectric breakdown | 14 | ASTM D149 | KV/mm |
| Volume resistivity | >1011 | ASTM D257 | Ohm-m |
| THERMAL | | | |
| Thermal conductivity | 2.2 | ISO 22007-2 | W/m*K |



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 guaranted. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser meeds 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 orconsequential damages of any kind. All LiPOLY products are soft as product or equert. All rights reserved, including LIPOLY trademarks or registered trademarks of LIPOLY or its affiliates.