

TOP 4
★★★★



ELECTRIC & HYBRID VEHICLE

Epoxy & Polyurethane Compounds





0218EV

Thermally Conductive Potting Compound

Epic 0218EV is a single component epoxy designed for high performance EV motor applications that require wide operating temperatures as well as high temperature performance. It is engineered with an excellent combination of bonding, thermal and structural strength properties. The fast gel time aids in efficient processing to reduce work in process. 0218EV exhibits good storage stability and features a 10-month shelf life at 25 °C.

PROPERTIES

Viscosity *Less than 10,000 cps @ 45 °C*

Thermal Conductivity *0.45 - 0.48 W/mK*

FEATURES

- ◆ Good chemical resistance
- ◆ High operating temperatures
- ◆ Excellent adhesion to a variety of substrates
- ◆ Easy processing
- ◆ RoHS compliant

COMMON APPLICATIONS

- ◆ Automotive electronic device potting
- ◆ Sensor and relay potting
- ◆ General adhesive and electronic applications



S7592

Flame Retardant Polyurethane Adhesive

Epic S7592 is a two component polyurethane adhesive designed to pass UL 94 V-0 flame retardant testing. Features include a convenient 2:1 mix ratio by volume with a high mixed viscosity. It has been formulated to provide superior adhesion to a variety of substrates, including plastic and metal.

PROPERTIES

Gel Time	<i>Process adjustable</i>
Hardness, Shore D	<i>62 - 67</i>
Lap Shear	<i>2,200 - 2,400 psi (aluminum to aluminum)</i>
Lap Shear (ABS to ABS)	<i>590 - 600 psi (substrate failed)</i>

FEATURES

- ◆ Convenient 2:1 volumetric mix ratio
- ◆ Excellent adhesion to most plastic and metal substrates
- ◆ Low viscosity or thixotropic versions available
- ◆ Room temperature curing system
- ◆ Medium Shore D durometer

COMMON APPLICATIONS

- ◆ Battery bonding
- ◆ Connector potting



S7591

Thermally Conductive Epoxy

Epic S7591 is a two component epoxy that is designed for high temperature applications. It features a low thermal expansion rate coupled with a high glass transition temperature. S7591 is also designed to provide an extremely high 3 W/mK thermal conductivity for rapid removal of heat generated by electrical/electronic components.

PROPERTIES

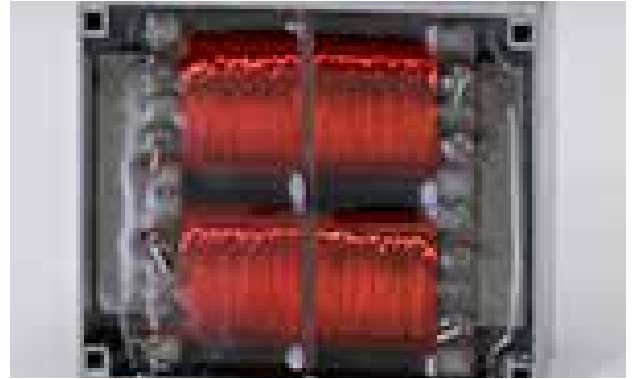
Glass Transition (T_g)	140 - 145 °C
Coef Thrm Exp (from 0 to 20 °C)	20 - 21 (Exp-6)/°C
Thermal Conductivity	2.95 - 3 W/mK

FEATURES

- ◆ Convenient 1:1 volumetric mix ratio
- ◆ RoHS compliant
- ◆ 100% solids system
- ◆ High thermal conductivity
- ◆ High operating temperatures

COMMON APPLICATIONS

- ◆ Motor and coil potting
- ◆ Sensor relays
- ◆ Highly temperature sensitive applications



O227

Thermally Conductive Single Component Epoxy

Epic O227 is a single component, 100% solids epoxy potting compound. It is designed to have a high thermal conductivity and a high glass transition for thermally demanding applications. This component is designed to pass UL 94 V-0 and have a CTE below 30 ppm.

PROPERTIES

Glass Transition (T_g)	135 - 140 °C
Thermal Conductivity	1.9 - 2 W/mK
Weight Change	-0.066%, after 168 hrs @ 175 °C
Viscosity	Less than 50,000 cps @ 45 °C

FEATURES

- ◆ RoHS compliant
- ◆ 100% solids system
- ◆ Designed to pass UL 94 V-0
- ◆ High operating temperatures

COMMON APPLICATIONS

- ◆ Motor and coil potting
- ◆ Sensor relays
- ◆ Highly temperature sensitive applications