

## ER2219

### Epoxy Resin

#### DESCRIPTION

**ER2219** is a semi-thixotropic, heat cure, one-part epoxy designed specifically for use as a dipping resin for hybrid circuits and discrete components. **ER2219** is also flame retardant.

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

#### FEATURES AND BENEFITS

- Single-part, semi-thixotropic epoxy; ideal for protecting discrete components on PCBs
- Flame retardant resin with high ionic purity; low ionisable chlorine content
- Can also be used as a dipping resin; versatile in use
- Quick cure at elevated temperatures; promotes efficient production processes

#### APPROVALS

Standard	Status
RoHS Compliant (2015/863/EU)	Yes
UL Approval	Meets UL94 V-0

#### PRODUCT INFORMATION

For available packaging sizes please visit:

[electrolube.com](http://electrolube.com)

### PHYSICAL PROPERTIES

Category	Results
<b>Liquid Properties</b>	
Density (g/mL)	1.16
Viscosity (mPa s 23 °C)	22900
Usable Life 20 °C 40 °C Refrigerated	6 months 5 weeks For extended usable life, store refrigerated. Allow to return to ambient temperature before use.
Cure Time 90 °C 100 °C 120 °C	40 minutes 30 minutes 15 minutes
Ionisable Chlorine Level (ppm)	228
<b>Cured System</b>	
Operating Temperature Range (°C)	-40 to 120
Volume Resistivity (ohm-cm)	10 <sup>14</sup>
Dielectric Strength (kV/mm)	12
Dielectric Constant @ 20 °C, 50Hz	4.0
Shore Hardness	75
Flame Retardancy	Meets UL94 V-0
Coefficient of Expansion (ppm/°C)	80 to 100
Water Absorption 7 days @ 23 °C	1.0%
Loss Tangent	0.03
Weight Gain (3 hours in boiling water)	1%
Glass Transition Temperature (°C)	80

### APPLICATION GUIDELINES

ER2219 is a single-part epoxy. It can be applied via syringe or automated equipment to protect localised areas and discrete components on PCBs. Alternatively, it can be used as a dipping resin. Once applied the product can be heat cured using the guidelines given above. It is not advised to heat prior to application in case of premature curing.

### GENERAL

Sedimentation of the resin has been minimised by careful attention to the formulation. However, any sediment which may have occurred over long periods of time must be dispersed before removing any material from the container. This dispersion can be carried out (if necessary) by stirring with a broad bladed spatula or gently rolling the can. Take care not to introduce excessive amounts of air during this operation or it may be necessary to re-evacuate the resin. Sedimentation will be accelerated by storage at high temperatures. Sedimentation found in resin packs forms no problem since the sediment is re-mixed when the pack is used.

### ADDITIONAL INFORMATION

- Cleaning:** It is far easier for machines & containers to be cleaned before the resin has been allowed to cure. RRS is suitable for cleaning machines and containers and cured resin may be slowly softened and removed by soaking in our RRS.
- Storage:** Please refer to storage conditions and useable life data provided above.

### SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.**

### CONTACT INFORMATION

To confirm this document is the most recent version, please contact  
**TechnicalSupportTeam@hkw.co.uk**  
[www.electrolube.com](http://www.electrolube.com)

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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