

Electrolube® ER2219

Epoxy Resin

DESCRIPTION

Electrolube® 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

Please contact your customer service representative for information on available package sizes.



TECHNICAL DATA SHEET

PHYSICAL PROPERTIES

Category	Results
Liquid Properties	
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 Ionisable Chlorine Level (ppm)	40 minutes 30 minutes 15 minutes
Cured System	
Operating Temperature Range (°C)	-40 to 120
Volume Resistivity (ohm-cm) 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



TECHNICAL DATA SHEET

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.

Electrolube®ER2219
Technical Data Sheet
Issue: 02 February 2022



TECHNICAL DATA SHEET

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

www.macdermidalpha.com

North America 140 Centennial Avenue Piscataway, NJ 08854 1.800.367.5460

Europe
Ashby Park
Coalfield Way
Ashby de la Zouch
Leicestershire, LE65 1JR, UK
44.01530.41960

Asia 8/F., Two Sky Parc 51 Hung To Road Kwun Tong, Kowloon, Hong Kong, SAR China 852.2500.5365

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

DISCLAIMER: All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. No statement or recommendation shall constitute a representation unless set forth in an agreement signed by officers of seller and manufacturer. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY (SI MADE. The following warranty is made in lieu of such warranties and all other warranties, express, implied, or statutory. Products are warranted to be free from defects in material and workmanship at the time sold. The sole obligation of seller and manufacturer under this warranty shall be to replace any noncompliant product at the time sold. Under no circumstances shall manufacturer or seller be liable for any loss, damage or expense, direct, indirect, incidental or consequential, arising out of the inability to use the product. Notwithstandine the foregoing, if products are supplied in response to a customer request that specifies operating parameters beyond those stated above, or if products are used under conditions exceeding said parameters, the customer by acceptance or use thereof assumes all risk of product failure and of all direct, indirect, incidental and consequential damages that may result from use of the products under such conditions, and agrees to exonerate, indemnify, defend and hold harmless MacDermid, Incorporated and its affiliates therefrom. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in a manner that infringes any patent or other intellectual property rights, and seller and manufacturer assume no responsibility or liability for any such infringement.

© 2019 MacDermid, Inc. and its group of companies. All rights reserved. "(R)" and "TM" are registered trademarks or trademarks of MacDermid, Inc. and its group of companies in the United States and/or other countries.

Electrolube® ER2219
Technical Data Sheet
Issue: 02 February 2022