

## ER1426

### Epoxy Resin

#### DESCRIPTION

**ER1426** is a very low viscosity unfilled, two-part epoxy resin, designed for powder bonding and impregnation applications. The standard color is water-white but other colors could be made available if required.

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

#### FEATURES AND BENEFITS

- Exceptionally low viscosity; ideal for applications with complex geometries and small spacing
- Clear system; allows visual inspection through the encapsulation resin
- High tensile strength; good mechanical protection
- Long useable life; ideal for impregnation applications

#### APPROVALS

Standard	Status
RoHS Compliant (2015/863/EU)	Yes
UL Approval	No

#### PRODUCT INFORMATION

For available packaging sizes please visit:

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

### PHYSICAL PROPERTIES

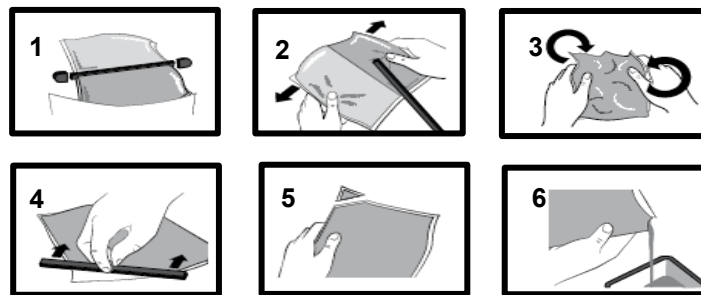
Category	Results
<b>Liquid Properties</b>	
Base Material	Epoxy
Color Part A - Resin Part B - Hardener	Water White Water White
Density Part A - Resin (g/mL) Part B - Hardener (g/mL)	1.05 0.92
Viscosity (mPa s 23 °C) Part A Part B Mixed System	200 25 100
Mix Ratio Weight Volume	4.00:1 3.40:1
Usable Life (20 °C)	120 minutes
Cure Time 40 °C 60 °C 100 °C	24 hours 8 minutes 2 minutes
Storage Conditions	Dry Conditions: Above 15 °C, Below 35 °C
Shelf Life	24 Months (Resin packs – 12 months)
<b>Cured System</b>	
Color (Mixed System)	Water White
Current Density (g/mL)	1.05
Temperature Range (°C)	-40 to 120
Max Temperature Range (Short Term (°C)/30 Mins) (Application and Geometry Dependent)	+140

Category	Results
Volume Resistivity (ohm-cm)	10 <sup>14</sup>
Dielectric Strength (kV/mm)	11
Shore Hardness	D85
Flame Retardancy	No
Tensile Strength (MPa)	70
Tensile Modulus (MPa)	3000
Flexural Strength (MPa)	100
Deflection Temperature (°C)	90
Coefficient of Expansion (ppm/°C)	100
Power Factor (@ 25 °C)	0.03
Permittivity @ 50 Hz (@ 25 °C)	4.0

### APPLICATION GUIDELINES – RESIN PACKS

#### Mixing Procedures

When in Resin pack form, the resin and hardener are mixed by removing the clip and moving the contents around inside the pack until thoroughly mixed. To remove the clip, remove both end caps, grip each end of the pack, and pull apart gently. By using the removed clip, take special care to push unmixed material from the corners of the pack. Mixing normally takes from three to four minutes depending on the skill of the operator and the size of the pack. Both the resin and hardener are evacuated prior to packing so the system is ready for use immediately after mixing. The corner may be cut from the pack so that it may be used as a simple dispenser. There is also a YouTube video ([Epoxy Mixing Instructions](#)) available on the Electrolube channel to show the mixing process.



### APPLICATION GUIDELINES - BULK

#### Bulk Mixing

When mixing, care must be taken to avoid the introduction of excessive amounts of air. Automatic mixing equipment is available which will not only mix both the resin and hardener accurately in the correct ratio but do this without introducing air. Containers of Part A (Resin) and Part B (Hardener) should be kept sealed at all times when not in use to prevent the ingress of moisture. Bulk material must be thoroughly mixed before use. Incomplete mixing or use of the wrong mix ratio will result in erratic or partial curing.

### 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:** When storing under very cold conditions, the hardener may crystallize. If this occurs, simply warm (40 °C) the container gently until all crystals have re-melted.

### 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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