

# 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





# **ELECTROLUBE**

# PHYSICAL PROPERTIES

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



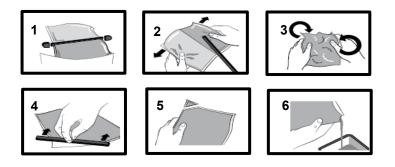
# **ELECTROLUBE**

| 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

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|---------------------------------|--|-------------------------------|
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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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