

EPC Electro-Plating Compound

EPC has been specially developed for use in electro-plating and anodising plants. EPC is not absorbed by plating solutions like ordinary mineral oil based grease can be; this is particularly relevant when used for hard chrome when very costly damage can be caused to the electrolyte. Ordinary greases will also rapidly deteriorate in a plating shop and leave an insulating layer on the contacts, an issue that does not occur when EPC is used. Application of EPC onto metal interfaces reduces resistance and energy consumption, thereby reducing voltage drop at connections and ensuring that the maximum plating current flows for any applied voltage. The product also inhibits against corrosion, reducing the frequency of cleaning.

- Improves plating quality by reducing voltage drop; provides constant plating current and density
- Reduces energy consumption; reduces maintenance costs
- Assists with efficient production; stabilises contact resistance
- Protects and seals bus-bar joints

Approvals

RoHS-2 Compliant (2011/65/EU):

Yes

Typical Properties

| | |
|--|-------------|
| Colour | Red |
| Density (g/ml) | 1 |
| Temperature Range (°C) | -40 to +135 |
| Evaporation Weight Loss (% 7 days @ 100°C) | 3.12 |
| Evaporation Weight Loss (% 7 days @ 125°C) | 4.40 |
| Copper Strip Corrosion (IP154 / ISO 2160) | ≤1b |
| Drop Point (IP32 / ISO 2176 (°C)) | >250 |
| Cone Penetration Worked (ASTM D217, 60 strokes @ 20°C) | 320 |
| Cone Penetration Un-Worked (ASTM D 217 @ 20°C) | 300 |
| Cone Penetration Un-Worked (ASTM D 217 @ -40°C) | 330 |
| Consistency (NLGI) | 1 |
| Fliessdruck (Flow Pressure) (DIN 51805, mbar @ -40°C) | 650 |
| Oil Bleed / Separation (IP121) | 5% |
| Plastic Compatibility - ABS | Test |
| Plastic Compatibility - PC | Test |
| Thickener | Clay |
| Water Content (%) | 0.4 |
| UV Trace | No |

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All information is given in good faith but without warranty. Properties are given as a guide only and should not be taken as a specification.

Electrolube cannot be held responsible for the performance of its products within any application determined by the customer, who must satisfy themselves as to the suitability of the product.

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BS EN ISO 9001:2008
Certificate No. FM 32082

Electrical Properties:

Dielectric Constant (1 MHz) 4

Base Oil Properties:

| | |
|--|---------------|
| Base Oil Type | Complex Ester |
| Base Oil Viscosity @ 40°C (Kinematic Viscosity (cSt)) | 55 |
| Base Oil Viscosity @ 100°C (Kinematic Viscosity (cSt)) | 15 |
| Base Oil Viscosity Index (ASTM D 2270) | 190 |
| Pour Point (ASTM D 97 (°C)) | -54 |
| Flash Point (COC ASTM D 92 (°C)) | 241 |

| <u>Packing</u> | <u>Order Code</u> | <u>Shelf Life</u> | <u>Container Dimension</u> |
|-----------------------|--------------------------|--------------------------|-----------------------------------|
| 1 Kg Bulk | EEPC 01K | 72 Months | 114 (diameter) x 120 mm (height) |

Directions for Use

1) Initial Application

Firstly, clean all contacts to remove corrosion – Electrolube Ultrasolve (ULS) can be used for this purpose. The surfaces should be abraded and EPC rubbed on until all the tarnish and corrosion have been loosened. The contaminated EPC should be wiped off and followed immediately by a clean application of EPC.

2) Routine Maintenance

Clean the contact surface, connections or busbars with an abrasive pad and wipe off all contamination and EPC. Immediately re-apply EPC. In cases of severe corrosion, or when regular maintenance has not been carried out, it may be necessary to carry out the 'initial application' procedure, as above.

Typical Product Applications

To prevent corrosion and contamination and improve electrical contact on anode and cathode bars, pick-up shoes, rack contacts, busbar joints etc. It is also formulated to assist in the removal of tarnish and corrosion.

Revision 1: Oct 2013