Technical Data Sheet

EPC
Electro-plating Compound

Product Description

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.

Features

- Improves plating quality by reducing voltage drop, thus providing constant plating current and density
- Reduces maintenance costs
- Stabilises contact resistance
- Seals busbar joints

Approvals **RoHS Compliant (2002/95/EC):** **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
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

Packing	Order Code	Shelf Life	Container Dimension
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.

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