



Technical Data Sheet

APLSP Acrylic Protective Lacquer (Spraying Viscosity)

Product Description

A flexible, fast drying transparent acrylic conformal coating for the protection of electronic circuitry. APLSP has been formulated to meet many of today's commercial applications. APLSP is formulated to offer the correct viscosity for selective coating and spray applications. This product has been formulated for professional use only.

Features

- Excellent adhesion to a wide variety of substrates.
- Fluoresces under UV light for ease of inspection.
- Wide operating temperature range.
- Can be soldered through without fear of highly toxic gases being produced (contains no isocyanates).
- Non-corrosive to Cadmium and Zinc plate (contains no phenols).
- Resistant to mould growth.
- Cured coating can be removed with Electrolube Ultrasolve (ULS).
- Excellent Dielectric properties

Approvals:	MIL Approval (MIL-1-46058C): RoHS Compliant (2002/95/EC): IPC-CC-830	Meets approval Yes Meets approval
Liquid Properties:	Appearance: Specific Gravity (Density) @ 20°C: VOC Content: Flash Point: Solids content: Viscosity @ 20°C: Touch Dry: Recommended Drying Time: Coverage @ 25µm:	Pale Coloured Liquid 0.90 g/ml 77% -7°C (Bulk), 23% 60-100 Centipoise 15-20 minutes. 24 Hours @ 20°C 4 Hours @ 60°C 2 Hours @ 90°C 10m ² Per litre
Dry Film Coating:	Colour: Operating Temperature Range: Flammability: Thermal Cycling (MIL-1-46058C): Coefficient of Expansion: Dielectric Strength: Dielectric Constant: Insulation Resistance: Comparative Tracking Index Dissipation Factor @ 1MHz @ 25°C Moisture Resistance (MIL-1-46058C):	Colourless -55°C to +125°C Self-extinguishing (ASTM Method D56) Meets approval 130ppm 45 kV/mm 2.5 1 x 10 ¹⁵ Ohms/cm (DEF-STAN 59/47) >300 Volts 0.01 Meets approval

<u>Description</u>	<u>Packaging</u>	<u>Order Code</u>	<u>Shelf Life</u>
<u>APLSP Conformal Coating</u>	25 litre Bulk	APL25LSP	48 Months
<u>APL Conformal Coating</u>	15 ml (Small bottle with brush)	APL15ML	48 Months
	400ml Aerosol	APL400H	36 Months
	500ml Bulk	APL500ML	48 Months
	5 Litre Bulk	APL05L	48 Months
<u>Universal Acrylic Thinners</u>	5 Litre	UAT05L	72 Months
<u>Removal Solvent</u>	200ml Aerosol	ULS200D	36 Months
	400ml Aerosol	ULS400D	36 Months
	1 Litre Bulk	ULS01L	72 Months
	5 Litre Bulk	ULS05L	72 Months
	25 Litre Bulk	ULS25L	72 Months

Directions For Use

APLSP as been specifically formulated to give viscosities between 60-100 centipoise for use in selective coating and spray equipment. The thickness of the coating depends on the equipment parameter set up (typically 25 microns). Temperatures of less than 16°C or relative humidity in excess of 75% are unsuitable for the application of APL. As is the case for all solvent based conformal coatings, adequate extraction should be used (refer to MSDS for further information). Substrates should be thoroughly cleaned before coating. This is required to ensure that satisfactory adhesion to the substrate is achieved. Also, all flux residues must be removed as they may become corrosive if left on the PCB. Electrolube manufacture a range of cleaning products using both hydrocarbon solvent and aqueous technology. Electrolube cleaning products produce results within Military specification.

Spraying – Bulk

APLSP is supplied at the optimum viscosity to give coating quality and thickness depends on the spray equipment and conditions.

APLSP is suitable both for use in manual spray guns and selective coating equipment.

The selected nozzle should enable a suitable even spray to be applied in addition to suiting the prevailing viscosity. The normal spray gun pressure required is 275 to 413kPa (40 – 60 lbs/sq.inch). After spraying, the boards should be placed in an air-circulating drying cabinet and left to dry.

Inspection

APL contains a UV trace, which allows inspection of the PCB after coating to ensure complete and even coverage. The stronger the reflected UV light, the thicker the coating layer is.

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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.