

APLSP

Acrylic Protective Lacquer (Spraying Viscosity)

DESCRIPTION

APLSP is a flexible, fast drying transparent acrylic conformal coating, used for the protection of electronic circuitry. It has been formulated for professional use only to the correct viscosity for non-atomised selective spray applications and meets the requirements of a variety of international standards.

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

FEATURES AND BENEFITS

- Promotes efficient production processes; ready to use for non-atomised spraying applications, no dilution required
- Good clarity and high level of stability when exposed to UV light
- Offers good protection in humid environments and resistant to mould growth
- Provides excellent adhesion to a wide variety of substrates

APPROVALS

Standard	Status
RoHS Compliant (2015/863/EU)	Yes
MIL Approval (MIL-1-46058C)	Meets Approval
IPC-CC-830	Meets Approval

PRODUCT INFORMATION

For available packaging sizes please visit:

electrolube.com

PHYSICAL PROPERTIES

Category	Results
Liquid Properties	
Appearance	Pale Color Liquid
Density @ 20 °C (g/mL)	0.90
VOC Content	77%
Flash Point	-7 °C
Solid Content	23%
Viscosity (mPa s @ 20 °C)	60 to 100
Touch Dry	15 to 20 minutes
Cure Time	
20 °C	24 hours
60 °C	4 hours
90 °C	2 hours
Coverage @ 25µm	9 m ² /L
Dry Film Coating	
Color	Colorless
Operating Temperature Range (°C)	-55 to 125
Flammability	Meets UL94 V-1
Thermal Cycling (MIL-1-46058C)	Meets Approval
Coefficient of Expansion (ppm)	130
Dielectric Strength (kV/mm)	45
Dielectric Constant	2.5
Surface Insulation Resistance	1 x 10 ¹⁵ Ω
Comparative Tracking Index	>300 Volts
Dissipation Factor @ 1MHz, 25 °C	0.01
Moisture Resistance (MIL-1-46058C)	Meets Approval

APPLICATION GUIDELINES

APLSP has been specifically formulated to a viscosity between 60 to 100mPa s, for use in non-atomised 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 APLSP. 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. We manufacture a range of cleaning products using both hydrocarbon solvent and aqueous technology. Our 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 to 60 lbs/sq.in.). After spraying, the boards should be placed in an air-circulating drying cabinet and left to dry.

INSPECTION

APLSP 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. UV light in the region of 375nm should be used for inspection.

ADDITIONAL INFORMATION

Shelf Life

Description	Shelf Life
APLSP Conformal Coating	48 Months
Removal Solvent	
Aerosol	36 Months
Bulk	72 Months

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

North America 109 Corporate Blvd. South Plainfield, NJ 07080, USA 1.800.367.5460	Europe Ashby Park Coalfield Way Ashby de la Zouch Leicestershire, LE65 1JR, UK 44.01530.41960	Asia 8/F., Paul Y. Centre 51 Hung To Road Kwun Tong, Kowloon, Hong Kong 852.3190.3100
--	---	--

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

DISCLAIMER: All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. No statement or recommendation shall constitute a representation unless set forth in an agreement signed by officers of seller and manufacturer. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY IS MADE. The following warranty is made in lieu of such warranties and all other warranties, express, implied, or statutory. Products are warranted to be free from defects in material and workmanship at the time sold. The sole obligation of seller and manufacturer under this warranty shall be to replace any noncompliant product at the time sold. Under no circumstances shall manufacturer or seller be liable for any loss, damage or expense, direct, indirect, incidental or consequential, arising out of the inability to use the product. Notwithstanding the foregoing, if products are supplied in response to a customer request that specifies operating parameters beyond those stated above, or if products are used under conditions exceeding said parameters, the customer by acceptance or use thereof assumes all risk of product failure and of all direct, indirect, incidental and consequential damages that may result from use of the products under such conditions, and agrees to exonerate, indemnify, defend and hold harmless MacDermid, Incorporated and its affiliates therefrom. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in a manner that infringes any patent or other intellectual property rights, and seller and manufacturer assume no responsibility or liability for any such infringement.

© 2019 MacDermid, Inc. and its group of companies. All rights reserved. "(R)" and "TM" are registered trademarks or trademarks of MacDermid, Inc. and its group of companies in the United States and/or other countries.