

Technical Data Sheet

Silver Conductive Adhesive 478SS

#12685-15

The Silver Conductive Adhesive 478SS is a conductive, silver-based polymer. It is a thick film ink that is used to conduct screen printing onto membrane switches. It can be heat cured for maximum performance. In addition, it is compatible with surface mount epoxy systems, has an extended screen residence time, has a high Tg to prevent any blocking, has outstanding creasability, excellent adhesion to polyester film, and has a very low sheet resistance. Furthermore, it has superior abrasion resistance and hardness.

Instructions

Curing

This product is made ready to use. If thinning is necessary, dilute 5% by weight with Carbitol Acetate. When finished, you may clean the equipment used with MEK, MIBK, Acetone or solvents alike.

Screen Printing Process

You may apply this product by the standard screen printing process. Dried thickness and final resistance may vary due to the following: screen mesh size, squeegee material, screen material, and emulsion thickness.

Recommended thickness, dried, μm	7.5 to 12.5
Emulsion thickness, solvent resistant emulsion, μm	20 to 37.5

Screen Type

Monofilament polyester screen, mesh	157 to 280
Stainless steel screen, mesh	165 to 325

Squeegee

For use on polyester screens, durometer	60
For use on stainless steel screens, durometer	70

Technical Information

Composition properties

Uncured Material

Solids content by weight, %	73%
Viscosity, Brookfield – RVT, 25°C, mPas (cP): Spindle 6, speed 20 rpm	20,000

Density, kg/l	2.52
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Shelf life at -12 to 27°C (from date of qualification in original seal), days	365
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Flash point, Tag closed cup flash tester, °C	110
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Cured Material

Physical properties

Pencil hardness	B
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Theoretical coverage at 25 µm coating thickness

Sq. ft./gal	555
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m ² /kg	5.41
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Electrical properties

Sheet resistance, 25 µm thickness, ohms/sq	<0.015
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