

UV-curable solder mask ink

(KSM-180WD 系列)

1 Features

KSM-180WD is UV-curable solder resist ink .Good over the net.Fast curing.With excellent adhesion,chemical resistance and insulation.Suitable for single panel substrate and character mark solder coating.

1.1 Specifications

Items	Features	Notes
Product Type	KSM-180WD	
Color	White	
Fineness	$\leq 12\mu\text{m}$	0~25 μm Fineness gauge
Viscosity (25°C)	$170\pm 20\text{dPa}\cdot\text{s}$	VT-04F
Density(25°C)	1.20~1.40g/ml	
Curing energy	1000~1500mJ/cm ²	The effective value through the polyester film
Package	5.0kg/Barrel ; 10kg/Box	Can be adjusted according to customer requirements
Shelf time	6 months since the date of manufacture	Store below 25°C in the dark

2process

Please correct the control and maintenance of the following operating conditions , when the operating conditions change , may affect the quality and reduce lead trustworthiness

2.1Process parameters

- (1) Mixed : Before use, should stir 15 to 20 minutes ;
- (2) Pre-treatment : chemical treatment combined with mechanical polishing , to ensure that the surface of the active substance no effect of residual ink adhesion ;
- (3) Mesh selection : 80 ~ 120T;
- (4) Curing : 1200 ~ 2000mJ / cm² (high pressure mercury lamp or metal halide).

2.2 Process Considerations

- (1) Keep the work environment clean , keep the board no dust contamination or residual impurities ;
- (2) Plate surface contamination will lead to lower quality and trustworthiness of ink ;
- (3) Operation should be carried out in a clean environment , clean room temperature 20 ~ 25 °C, relative humidity of 50 to 60% ;
- (4) Avoid UV light and sunlight irradiation straight , the ideal operation should be carried out in yellow light ;
- (5) Cans after the ink used in the recovery operation ambient temperature , stir before use ;
- (6) Do not add thinner when using ink, if you have to add, please consult us. Because diluted ink will affect various properties of the ink, this model does not apply common solvent inks ;
- (7) The thickness of the cured ink to 12 ~ 20μm is appropriate , too thick will affect the ink adhesion , chemical resistance and pencil hardness ;
- (8) Curing conditions because of different UV lamps and equipment vary . Please test after test set production conditions and scope . Curing conditions beyond the specified range will affect various properties of the ink
- (9) Cleaning stencils , please apply ester solvent , after cleaning and drying can apply again.

3 Ink coating properties

3.1 Main features

Items	Features	Notes
Pencil hardness	≥4H	Pencil harder, JIS K5400 8.4

Adhesion	100/100	Laceration experiment, JIS K5400 8.5
Resistance to molten solder	260±5°C×3seconds×3 times OK	JIS C6481 5.5
Resistance to flame	UL94 V-0	Certified number: UL-E189612

Attention :

1. The base and hardener should be mixed according to the ratio and stirred thoroughly before using.
2. We will offer you special diluent if the ink need dilute.
3. The values above are based on experiments in our lab. Experiments need to be carried out in order to get proper using condition.

