

FINEDEL DSR-8000S8-19

FINEDEL DSR-8000S8-19 is an alkali developing type, photo-imageable liquid solder resist for simultaneous exposure on both sides of printed wiring board.

·This product is excellent of solder heat resistance type .

·This product is excellent of Ni-Au type .

·This product none halogen type .

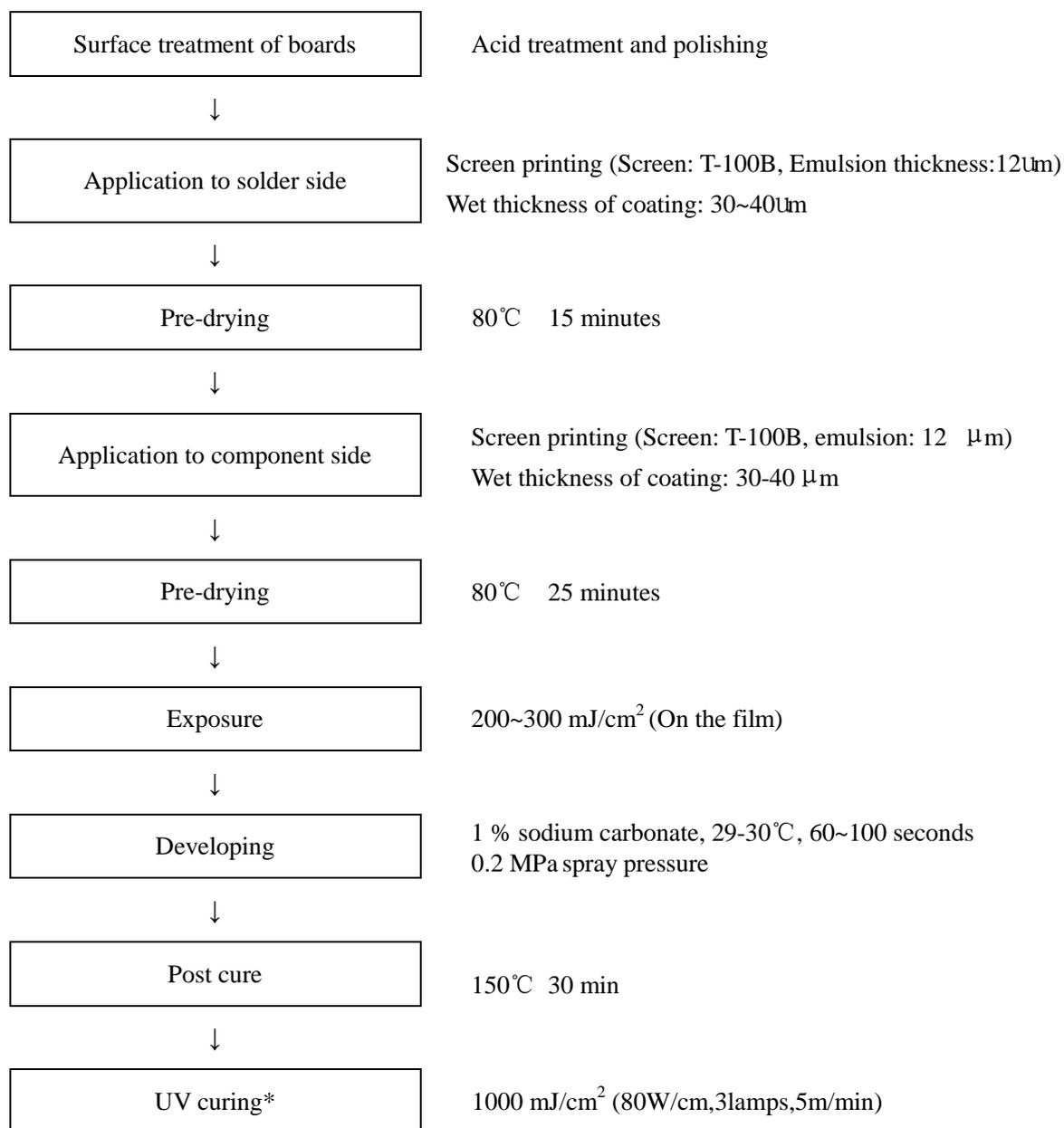
1、 General specifications for FINEDEL DSR-8000 S8-19

Table 1、 General specifications of DSR-8000 S8-19

Items	Specification
Color	GREEN
Viscosity	170 ± 40 dPa · s (BROOKFIELD HBT at 25°C)
Specific gravity	1.4
Non-volatile components	78 ± 3 wt %
Flash point (Tag closed type)	76°C
Mixing ratio	Main component : 700 g Hardening agent : 300 g
Pot life (When stored in a dark place at below 20°C)	24 hours after mixing hardening agent
Shelf life (When stored in a dark place at below 20°C)	Main component and hardening agent: 3 months

*This product is defined as “halogen-free” according to JPCA-ES-01(below 900ppm).
Though this product contains several hundred ppm of halogen

2、 Example of board processing



*1. perform UV curing process when it is desired to improve the resistance to Au-plating, or when using high activity flux in soldering process of hot air leveler.

*2. in the case of the use of UV symbol marking ink, pre-test for adhesion between UV symbol marking and solder resist be managed to avoid incompatibility both inks.

3、 Direction

As this product is two components type, mix and stir the main component, DSR-8000S8-19, and the hardener, CA-8000S8-19 , in a mass ratio of 700 g: 300 g before use.

And stir for approximately 30 minutes, then use.

Use the ink within 24 hours after the mixing.

4、 Precaution for use

- a) For cleaning the screen, use the Cleaner #500, ester or cellosolve type solvent, or a mixed solvent of ester and cellosolve type.
- b) Use undiluted ink. In case of any viscosity adjustment, use the specified thinner #2200(CN).
- c) After the surface treatment of printed wiring boards, avoid any hand grease or stain on the boards and immediately print with the ink and cure it.
- d) For drying the film after printing, pre-drying temperature is suitable at 80°C, however, the drying condition should be set in advance. Because the temperature depends on shape, heat capacity of a dryer and the number of boards.
If the drying is not sufficient, the film is sticky and sticks to the artwork film when in exposure.
If the drying temperature is excessively high, it will result in defective development.
- e) Use this ink in places to avoid any fire.
- f) Use this ink in a well-ventilated working room.
- g) Store this ink in a cool place at below 20°C

5、 Experiment data (Reference)

Properties of cured film of FINEDEL DSR-8000S8-19

Table 2、 Hardened film performance of FINEDEL DSR-8000S8-19

Items	Performance	Test methods (Test conditions)
1.Pencil Hardness	6H	JIS C 5012-1993 8.6.3 Pencil hardness
	6H	IPC-SM-840C 3.5.1/TM 2.4.27.2
2. Adhesion	100/100	JIS C 5012-1993 8.6.2 Cross-cut Tape test
	Passed	IPC-SM-840C 3.5.2.1/TM 2.4.28.1 No peeling shall occur on copper or boards.
3. Sensitivity	Step 11	350 mJ/cm ² (above the resist surface), Kodak step tablets 21 step
4. Resolution	50um	UV light energy: 200 mJ/cm ² on surface of pre-dried resist. Coating thickness: 35um (wet) Test boards: For QFP mounting use, with 50um of copper.
5. Resistance to solvents and cleaning agents	No abnormality on the film	IPC-SM-840C 3.6.1.1 No blister, peeling, swelling or discoloration shall occur on the film: Isopropanol Room temperature 2 minutes
		3-methoxy-propanol acetate Room temperature 60 minutes
6. Resistance to chemicals	No abnormality on the film	No abnormality shall occur on the film. 10 % sulfuric acid Room temperature 20 minutes 10 % sodium hydroxide Room temperature 60 minutes
7. Solder heat resistance *1	No abnormality on the film	No blister or peeling shall occur on the film. Observe the appearance after tape peeling Flux: SOLDERITE MH-820V Solder temperature 260°C, 10 seconds, dipping 3times Solder temperature 288°C, 10 seconds, dipping 2times
8. Resistance to gold plating *2	No abnormality in cured film	No blistering, peeling, swelling or discoloration shall occur on the film. Non-electrolytic gold plating Ni 3μm Au:0.05μm, appearance after peeling off tape.

*1 Abnormality may occur on the film, depending on the type of flux used. Use, therefore, after performing tests in advance.

*2 Abnormality may occur on the film, depending on conditions of plating bath. Use, therefore, after performing tests in advance.