CLARK INTERNATIONAL
PROMOTING EXCELLENCE IN THE ELECTRONICS INDUSTRY

PRODUCT DATA SHEET

PC 441 MARKING INK – ALL COLORS

DESCRIPTION:

PC 441 Marking Ink is a two part, liquid rheology, and thermally cured epoxy marking ink for printed circuit boards. It has been designed for excellent adhesion to most solder masks and substrates, including photodefineable solder masks. PC 441 Marking Ink exhibits excellent flow and leveling characteristics, and maintains optimum screening rheology throughout the pot life of the mixture. The colors do not degrade or darken upon cure, the hot-air solder-leveling process or upon aging.

COLORS:		White, Yellow, Black
% SOLIDS:		≥ 95%
ODOR:		Mild
APPEARANCE:	Uncured:	Pigmented Thixotropic liquid
	Cured:	Smooth, defect free gloss
POT LIFE:	W Hardener:	One Week
SHELF LIFE:		Over One Year

DIRECTIONS FOR USE:

Surface Preparation:

The board should be free of all grease, oxidation, and other forms of surface Contamination. A soft mechanical scrub is recommended, followed by hot water rinse and thorough hot air dry. If a chemical dip is required, it should be followed by the scrub step.

Mixing:

Mix 100 parts of PC 421 Marking Ink with 10.0 parts by weight of W Hardener. Pot life (after mixing) for optimum screening performance is approximately one week with W Hardener.

Screening Process

Mesh: 250 – 305 mesh stainless steel or polyester monofilament tensioned to 22 – 24 N/cm_ is recommended.

Emulsion: A 35-micron capillary emulsion is recommended as a good general emulsion for most situations. For higher resolution work, an 18-micron capillary emulsion is recommended.

Squeegee: A 60-70-durometer squeegee is recommended. It should be well sharpened and 10-20 degrees from vertical.

Wash up: Glycol ethers or glycol ether-based screen wash solutions should be used for removing the wet material from the screen.

Cure Cycle:

10.0 pph W Hardener 20 to 25 minutes at 275 to 300°F (135 to 150°C)

STORAGE AND SHELF LIFE:

For optimum performance, PC 441 Marking Ink should be stored at temperatures no lower than 65°F (18°C), and no higher than 90°F (32°C). Material stored at temperatures outside the required range should be kept at 75-80°F (24-27°C) for at least 24 hours prior to use for designed screening properties. There is no limitation on the shelf life of the uncatalyzed material if stored properly. For optimum screening performance, 3 months is recommended.

CAUTION:

Keep away from heat and flames. May cause irritation. Avoid contact with eyes or prolonged contact with skin. Wash exposed areas with soap and water; flush eyes with water for 15 minutes. Wash clothes before re-use. Use adequate ventilation, avoid exposure for long periods of time. If inhaled, remove to fresh air, give oxygen and artificial respiration, if needed. Do not take internally. If swallowed, give water or milk, induce vomiting. Seek medical attention.

For more information, contact
Clark International, Inc.. P.O. Box 8808, Rancho Santa Fe, CA 92067
Telephone: 858.227.3087 Fax: 858.759.3087
www.ClarkInt.com