2500 Series

The 2500 series is a family of inks for printing on acrylic resins, and features outstanding weather resistance and clarity for screen printing on nameplates and electrical signs. The inks in this series are air-drying inks of low odor. They are free of peeling, discoloration, fading, or cracking at the time of forming. Use of exclusive solvents is highly recommended as acrylic resins are affected relatively easily by solvents. Moreover, the inks in this series must never be mixed with other inks.

Specifications

Ink type	Air-drying ink of low odor level consisting of acrylic resin, other special resins, and high-quality coloring pigments of high weather resistance.
Usage	Ideal for printing on nameplates and electrical signs made of acrylic resin and other plates.
Finish	Semi-gloss (slightly varying with the color) finish with good leveling and smooth film of outstanding pattern reproduction. Outstanding transparency and coloring for electrical signs.
Covering and shading power	Outstanding covering power of black color for nameplates.
Clarity	Eight transparent colors are available. 110 (electrical sign white) emphasizing semitransparent white is also available for lining under electrical signs.
Weather resistance	This series of inks have excellent weather resistance when printed on the interior surface of acrylic signs. Weather resistance is reduced when printed on the exterior. Also, chalking may occur with high concentration colors. Sample before use.
Secondary processability	Outstanding secondary processability (heat resistance, etc.) after printing, especially for postprinting forming of electrical signs without cracking or discoloration.
Adhesion	Outstanding adhesion especially to acrylic resin plates, plus weather resistance for use with electrical signs.
Drying time	Air-dries (20˚C) in about 30 minutes (sets to touch). Curing for 5-10 minutes after printing at temperature 60-80˚C will further increase adhesion. Troubles due to drying conditions and other factors may result when printing on molded signboards, especially when they are let to dry on racks in poorly ventilated and cold places. These problems can be prevented by the addition of quick-dry solvent and by thermal curing. Acrylics resin plates should be stored carefully as they easily absorb moisture and cracks will result when printing on moist resins.
Viscosity adjustment	Ideal viscosity varies with the printing environment. Normally, an adequate working viscosity is obtained when T-2500 is added to the ink in proportion of 5-15 to 100 (ink).
Slow-dry solvent	Use T-2500S or T-980 for summer or precision printing.
Screen	Use of water-soluble cut film or photomechanical process in combination with Tetron or nylon screens of 200-300 mesh is recommended.
Wash-up	Use T-15 for economical wash-up.
Notes	The inks in this series must never be mixed with other inks. Use of exclusive solvents is highly recommended as ordinary solvents will affect drying time and cause crazing and other problems in the material and the printed film.

2500 Ink Film Test Results

Item	Result	Condition
Hardness	3H	Pencil hardness 45° x 200g
Adhesion	100/100	Peeling test at 1mm pitch crosscut using cellophane tape
Line drawing test	Not affected	Peeling test using cellophane tape at 1kg load
Water resistance	Not affected	Soaked in tap water for 1 month
Boiling resistance	Not affected	Soaked in boiling water for 8 hours
Blocking resistance	Not affected	70°C x 3kg x 24 hours

Test conditions

Material : Acrylic plate (extruded)
Drying : 1 week at room temperature (20˚C)

2500 Series Ink Weather Resistance List

Color	Value	Color	Value	Color	Value	Color	Value	Color	Value
120	◎5	220	◎5	440	◎5	500T	◎5	550T	◎5
200	5	265	◎5	456	◎5	510	5	580	◎5
200T	◎5	304	◎5	460	◎5	510T	◎5	586	◎5
208	5	320	◎5	495	◎5	513	◎5	710	◎5
208T	◎5	350	◎5	498	◎5	538	◎5	765	◎5
210	◎5	400	4~5	500	5	550	5		

*1.Value 5 :
Adequate resistance after 600 hours on Weather-o-Meter (WEL-SUN-DC).

2.Value ◎5:
Adequate resistance after 1000 hours on Weather-o-Meter (WEL-SUN-DC).

3.Samples:
Back printing on transparent acrylic plates plus solid white overlap printing.