



SOLVENT BASE

EM SERIES SCREEN PRINTING INK ON GLASS

CHARACTERISTICS:

Gloss and even ink layer, Excellent fineness, Good Sieving and Leveling, Properties and adhesion on polarized substrates after curing, High Hardness and good water, weather and chemical resistance.

APPLICATION

Tempered Glass and Lens, Like mobile, GPS, LCD TV.

ENVIRONMENT FRIENDLY CHARACTERISTICS

- a) Non-intentional to use CL & Br in the raw materials. (Cl ≤ 900ppm, Br ≤ 900ppm, Cl + Br ≤ 1500ppm)
- b) There is no the burden material for the environment, like Benzene, Methyl benzene, Xylene, Isophorone, Anone, etc.
- c) The ink meets the ROHS, EN71 Standard.

PHYSICAL CHARACTERISTICS:

Mesh : 40-168T (Exclude the matching color of Gold , silver and pearl powder)
 Curing condition : Black 180°C @10~20Min, 150°C@30Min, white 80°C @30~60 Min, 130 °C @30 Min,
 Solvent : S-3, S-2G(slow drying)
 Cleaning Agent :S-186(Clean the screen and mesh purpose)
 Hardener : EMG-02, EMG-06A(Rate : White :7-10% , other colors: 10-12%)
 Other Agents: Strengthen Agent : GL-262(Rate :2%)
 Anti-Foaming Agent: XC3-240, wet agent :XC3-229(Rates Based on the practical printing conditions)

PERFORMANCE PARAMETER

1	Adhesion	1m/m × 1m/m × 100 Grid ok
2	Pencil Hardness	≥ 3H
3	Fineness	< 5 μm (Exclude the Pearl & Gold powder)
4	Water Resistance	1000g Alcohol 100 times : OK
5	Acid Resistance	5% H2SO4 on the printing surface 24hrs: OK
6	Alkali Resistance	5% NAOH on the printing surface 24hrs : OK
7	Viscosity	8000 - 15000 CPS

COLOR MATCHING SYSTEM

Only use with the GL Series ink for the color matching, do not mix with other series ink.

BASIC COLOR & PERFORMANCE

Code	Color	Opacity	Sun-proof	Color re-print immersing	Notes
1100	Clear	-	-	-	-
1100L	High Viscosity	-	-	-	Avoid peel powder to subside
1104	White	high Opacity	6	-	Blush white
1105	White	High opacity	4	Excellent	-

2006	Lemon yellow	High opacity	7	Excellent	-
2003	Original yellow	Opacity	6-7	Excellent	-
3001	Rose red	Transparent	7	Good	-
3002	Deep red	High opacity	6	Excellent	-
3005	Orange red	Opacity	7	Excellent	-
3008	Pink	Transparent	7	Excellent	-
4001	Violent	High transparent	7	Excellent	-
4008	Blue	Transparent	7	Excellent	-
Code	Color	Opacity	Sun-proof	Color re-print immersing	Notes
5001	Black	Opacity	7	Excellent	Blush Black
5002(M)	Black(matt)	High opacity	7	Excellent	Light blush black
5003(M)	Black (matt)	High opacity	7	Excellent	Red phase black
5004	Black	High opacity	7	Excellent	Red phase black
EMNS-5004	Black	Opacity	7	Excellent	High Surface tension

Note

Sun-proof grade refers to all the color of the ink, if it is the light color, the grade value will be half less.
 Printing more times and more colors and color immersing meaning means to print the colorful colors first, then to print the white color, and to inspect the color will be immersing or not @ 160°C 30mins.

USAGE METHOD

Please mix the hardener of GEM Series with use the EM Series ink, e.g. 100g EM-5003mix 10g EMg-02.
 Please Stir well about 10 minutes after mix the fixed rate hardener before printing.
 The solvent can be added 5-15% if it is necessary during stirring.
 In case of more colors to print, the next color can be printed after the previous color top drying (5-10 Min @80~150°C) for the totally dry after finish printing, it should be curing in the oven about 30min @ 150~180°C
 Please use the solvent to clean the screen if the mesh is plugged, and cannot print until the solvent volatilized.
 Cannot use with other series ink together.

Notice

We Suggest to test the the ink and confirm it meet the requirement before the bulk production.
 To clean well the substrate before the printing to Improve the adhesion and avoid the pin hole and shrinkage cavity.
 Please use up the ink within 4 hours after after mix the hardener and keep the temperature at 25°C & 65% humidity.
 If the substrate surface is static, there will be the pinhole problem after printing.
 If the humidity is very high at the printing environment , it will influence the printing effect.
 It is easily to reactive between the GL Hardener and the water, so please seal the container Strictly after use the hardener to avoid the water, the air to reactive with the hardener.

SHELF LIFE

EM Series Ink Shelf life is 1 year, and EMG Hardener Shelf life is half a year.

HAZARDOUS SUBSTANCE

Class 3 Dangerous Good (Flammable Liquid)

SAFE HANDLE

Please wear glove and safety glasses in case of contact with skin and eyes. If ink splashes onto skin or into eyes, rinse immediately with plenty of water, and seek medical advice.
 Store container in a cool, dry place. Keep away from source of heat, flame and direct sunlight.
 We strongly recommend that you handle this product according to MSDS.

The above statements are accurate to our best knowledge and belief. However, due to the great number of possible influences during the manufacture of the substrate and the variation in the application process we suggest that suitability testing take place under actual conditions before production. No legally binding guarantee of certain properties or of the suitability for a definite application purpose can be derived from the above information.