

## 59000 Series Enamel Plus Gloss Screen Ink

Code Ref: D432

technical information and application instructions

<b>Substrates</b>	Metal, wood, Masonite, glass, anodized aluminium, paper, cardboard, and some hard plastics
<b>End Uses</b>	Used on outdoor signs and displays, novelties, synthetic decals, and packaging containers.

### Product Information

59000 Series is a solvent-based enamel ink formulated to screen print on a wide range of hard-to-adhere-to surfaces, such as glass, metal, wood, and some hard plastics. Pre-testing is very important.

### Application Information

*While technical information and advice on the use of this product is provided in good faith, the User bears sole responsibility for selecting the appropriate product for their end-use requirements. See full disclaimer at end of document.*

<b>Mesh</b>	75T-110T monofilament polyester.
<b>Stencil</b>	All direct photo emulsions, photo stencil films and hand cut stencil films that are solvent resistant.
<b>Squeegee</b>	70 to 80 durometer polyurethane blades as well as triple durometer blades that produce an even ink deposit.
<b>Coverage</b>	25 - 35 sqm/kilo depending on mesh used.
<b>Printing</b>	59000 Series inks should be thinned 5%-10% with D564-S173 59000 Thinners to assure proper ink flow. Always mix well prior to each use. D564-S173 59000 Thinners may also be used to reduce ink viscosity for roller coating application.
<b>Drying</b>	59000 Series dries by oxidation, requiring 24-48 hours for total cure/dry and the development of maximum adhesion and chemical resistance. Tack-free drying time is 4-6 hours. To obtain an immediate tack-free surface, heat set at 85°C for 30 minutes.
<b>Thinners</b>	The inks must be thinned with approximately 15-20% of N665 S303 44-180 Thinners or N665 S307 44-182 Retarder or Universal Retarder – D564-S064.

### **Clears / Extenders / Additives**

D432-A250 Overprint Clear may be used for extended exterior durability of the colours, to reduce colour density, or as a metallic mixing clear vehicle.

D432-A135 Gloss Coating Varnish may also be used as a roller coat overprint clear, or as a metallic vehicle.

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## Adhesion Testing

1. Touch of ink surface – when fully dried the ink will not be tacky.
2. Thumb twist – when fully dried the ink surface will not mar or smudge.
3. Fingernail scratch test – thoroughly dried ink will resist scratching.
4. Cross hatch tape test – use a cross hatch tool or sharp knife to cut through the ink film only. Apply 3M #600 clear tape on cut area, rub down, wait for 1 minute and rip off at a 180° angle. Ink should only come off from the actual cut areas.

## Clean Up

D564-S173 59000 Thinners or N660-S344 Screen Wash for cleaning ink from the screen.

## General Guidelines

### Ink Handling

All personnel mixing and handling inks must wear gloves and eye protection. Clean up spills immediately. If ink does come in contact with skin, wipe off with a clean, dry, absorbent cloth (do not use solvent or thinner). Wash and rinse affected area with soap and water. Consult the 59000 Series SDS for further instructions and warnings.

### Storage

Store tightly covered at temperatures between 15°C - 32°C. Ink taken from the press should not be returned to the original container. Store separately to avoid contaminating unused ink.

Shelf life of unopened cans is 2 years from date of manufacture. The ink will have a surface skin – this is normal for an oxidation system – remove carefully then stir well before use.

## caution

Please proof this ink, reduced to the consistency you wish to adopt, on a sample of the ACTUAL SUBSTRATE you will be printing BEFORE starting a production run.

Give the proof 24 hours to post cure then check for: Abrasion resistance, adhesion, print appearance and correctness of colour. The adequacy of this ink in these properties cannot be fully established on laboratory equipment on a small scale.

**Keep away from heat and open flame. Use with adequate ventilation. Avoid prolonged or repeated contact with skin. Avoid prolonged breathing of vapour or spray mist. Keep container closed when not in use.**

*GL stands behind the quality of this product. GL cannot, however, guarantee the finished results because GL exercises no control over individual operating conditions and production procedures. While technical information and advice on the use of this product is provided in good faith, the User bears sole responsibility for selecting the appropriate product for their end-use requirements. Users are also responsible for testing to determine that our product will perform as expected during the printed item's entire life cycle from printing, post-print processing, and shipment to end-use. This product has been specially formulated for screen printing, and it has not been tested for application by any other method. Any liability associated with the use of this product is limited to the value of the product purchased from GL.*

[end]

Last date amended: 7 February 2023