

59000 Series Enamel Plus Gloss Screen Ink 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 plastics for outdoor signs and displays.

SUBSTRATES Glass, metal, wood and some hard plastics

USER 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 the end of the document.

MESH 200-280 tpi (78-110 tpcm) monofilament polyester mesh for most applications

STENCIL Solvent resistant direct emulsions and capillary films

SQUEEGEE 70-80 durometer polyurethane squeegee

COVERAGE 1,000-1,400 square feet (93-130 square meters) per gallon depending upon ink deposit

PRINTING 59000 Series should be thinned up to 15% to assure proper ink flow (see Additives section). Add only enough ink to the screen to be able to print for 5-10 minutes. Add additional ink in small increments throughout the print run to maintain screen stability. Thoroughly mix the inks prior to printing.

Maintain ink temperature at 65°-90° F (18°-32° C) for optimum print drying performance. Lower temperatures increase the ink viscosity, impairing both flow and drying. Elevated temperatures lower the ink viscosity, reducing print definition, film thickness and opacity. Pretest to determine optimum printing performance for a particular set of ink, substrate, screen, press, and drying variables/conditions.

DRYING 59000 Series dries by oxidation, requiring 24-48 hours for total cure/dry. Tack-free drying time is 4-6 hours. To obtain an immediate tack-free surface, heat set at 180°F (83°C) for 30 minutes

CLEAR / VARNISHES Overprint Clear / Mixing Clear / Metallic Mixing Clear: Use 59140 Overprint Clear as an overprint clear providing added surface protection. Also use as a mixing clear to reduce the density of colors or as a clear base for specialty additives such as Metallics. 59120 Base can be used as well to reduce color density.

Gloss Roller Coating: Use 59135 Gloss Coating Varnish as a roller coat overprint clear or as a clear base for specialty additives such as Metallics.

Flat Roller Coating: Use 59172 Flat Coating Varnish as a roller coat overprint clear.

ADDITIVES All additives should be thoroughly mixed into the ink before each use. Prior to production, test any additive adjustment to the ink.

Reducer: Use 59000 Thinning Varnish or 5560 Fast Thinner to reduce the viscosity of these inks. Add up to 15% by weight. The 59000 Thinning Varnish may also be used to reduce ink viscosity for roller coating applications.

Retarder: Use a blend of 5560 Fast Thinner and 9050 Retarder to slow drying.

Gloss / Flattening Powders / Improved Slip: Use 59118 Flattening Paste to reduce gloss.

CLEAN UP

Screen Wash (Prior to Reclaim): Use IMS202 Universal Graphic Screen Wash
Press Wash (On Press): Use IMS301 Premium Graphic Press Wash

STORAGE

Store tightly covered at temperatures between 65°-90°F (18°-32°C). Ink taken from the press should not be returned to the original container; store separately to avoid contaminating unused ink.

GENERAL INFORMATION

INK HANDLING

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

ADHESION TESTING

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

PRODUCT OFFERING

STANDARD PRINTING COLORS

Standard Printing Colors have excellent opacity characteristics.

HALFTONE COLORS

Halftone Clear is used to reduce the density of any of the halftone colors.
Halftone Colors are formulated with increased densities in order to have the flexibility to satisfy most process color density requirements.

TRANSPARENT COLORS

Transparent Colors can be used at full color strength, in color matches, or let down with overprint clear or base.

SPECIAL ADDITIVES

When inks are to be printed over a special effect color, the overprinting ink(s) must be evaluated for intercoat adhesion before proceeding with the production run. To maximize intercoat adhesion, specialty colors should be printed as late as possible in the print sequence. Pigments may settle in the container; prior to printing, thoroughly mix the ink. The following special effect pigments may be added to the 59000 inks. These pigments are available in 1-pound containers. Contact Nazdar for the item number(s) and availability of each special effect product.

Metallics: Silver (aluminum) - Add up to 8% by weight, Gold (bronze) - add up to 15% by weight. Mix only enough metallic ink to be used the same day. Chemical reactions in metallic inks may result in viscosity, color and printability changes over time.

Pearlescents / Interference / Multi-Chromatic: See the Pearlescent, Interference, and Multi-Chromatic Technical Data Sheets for more information.

COLOR CARD MATERIALS

The following is a list of screen printed samples available.

Special Effects Color Card: shows Metallic, Pearlescent, Interference, and Multi-Chromatic effects mixed with clear

PACKAGING

All items listed below are available in quart and gallon containers.

'LF' ITEM NUMBERS

Colors with a stock number containing 'LF' indicate a lead-free alternative that replaced a lead containing color. All colors listed in this document are lead-free.

Stock Number	Standard Printing Colors	Stock Number	Transparent Colors
59LF102	Fire Red	59610	Trans Primrose Yellow
59106	Scarlet Red	59612	Trans Medium Yellow
59111	Black	59613	Trans Green
59112	White	59618	Trans Red
59114	Medium Brown	59620	Trans Orange
59122	Super Opaque White	59622	Trans Blue
59120	Base	59628	Trans Gold
59LF124	Brilliant Orange	59633	Trans Purple
59LF130	Primrose Yellow	59660	Stop Sign Red
59LF132	Lemon Yellow		
59LF134	Medium Yellow	Stock Number	Halftone Colors
59135	Gloss Coating Varnish	59170	Halftone Clear
59140	Overprint Clear	59167	Halftone Blue
59LF142	Emerald Green	59169	Halftone Magenta
59LF148	Medium Green	59LF168	Halftone Yellow
59152	Peacock Blue	59166	Halftone Black
59156	Ultra Blue		
59158	Dark Blue		
59172	Flat Coating Varnish		
59191	Flat Black		
59192	Flat White		
59204	Bright Red		
59410	Yellow		
59411	Warm Red		
59417	Rubine Red		
59418	Rhodamine		
59422	Reflex Blue		
59433	Purple		
59440	Process Blue		
59441	Green		

PACKAGING

Additives/Reducers are available in quart and/or gallon containers.
 Cleaners are available in gallon, 5 gallon and 55 gallon containers.

Stock Number	Additives/Reducers	Stock Number	Clean Up
5560	Fast Thinner (not available in quarts)	IMS202	Universal Graphic Screen Wash
9050	Retarder (not available in quarts)	IMS301	Premium Graphic Press Wash
59000	Thinning Varnish		
59118	Flattening Paste		

Nazdar® stands behind the quality of this product. Nazdar® cannot, however, guarantee the finished results because Nazdar® 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 Nazdar®.

Based on information from our raw material suppliers, these products are formulated to contain less than 0.06% lead. If exact heavy metal content is required, independent lab analysis is recommended.

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