

v 7 EN Ref: v 7 EN

5500 Series Flat Poster Screen Ink is a flat finish solvent-based ink formulated for printing on paper and card stock. 5500 Series is a cost-effective ink for short term POP displays, posters, serigraphs applications.

Substrates

- Coated paper
- Uncoated paper
- Card Stock

Substrate recommendations are based on commonly available materials intended for the ink's specific market when the inks are processed according to this technical data. 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. Reference the 'Quality Statement' at the end of this document.

User Information

Mesh

175-230 tpi (70-110 tpcm) monofilament polyester mesh for most applications.

Stencil

Use direct emulsions and capillary films which are solvent resistant.

Squeegee

70-80 durometer polyurethane squeegee.

Coverage

Estimated 1,000 – 1,500 square feet (93 - 140 square meters) per gallon depending upon ink deposit. Reference www.nazdar.com for examples of coverage calculations.

Printing

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 ink prior to printing. Improper mixing can lead to inconsistent color and ink performance.

Maintain ink temperature at 65°-90°F (18°-32°C) for optimum print and cure performance. Lower temperatures increase the ink viscosity, impairing flow and increasing film thickness. Elevated temperatures lower the ink viscosity, reducing print definition and film thickness.

Pretest to determine optimum printing parameters for a particular set of ink, substrate, screen, press, and curing variables/conditions.

Nazdar does not recommend inter-mixing of 5500 Series with other inks besides the 5500 Series.

Drying Parameters

5500 Series ink dries by solvent evaporation in 20-30 minutes, and may be force dried in a conveyor dryer with good air flow at temperatures of 110°-130°F (44°-55°C) within seconds.

Clears / Varnishes

Mixing Clear / Metallic Mixing Clear: Use 5530 Transparent Base to reduce the density of colors or as a clear base for specialty additives such as Metallic additives.

<u>Base:</u> Use 5536 Extender Base to increase coverage without affecting ink viscosity.

Common Performance Additives

When required, any additives should be thoroughly mixed before each use. Prior to production, test any additive adjustment to the ink. Inks containing additives should not be mixed with other inks.

Example for additives: Ink at 100g with 8% of an additive is calculated as:

100g ink + 8g additive = 108g total

<u>Reducer / Retarder:</u> Use 5500 Thinner or 9050 Retarder Thinner to reduce the viscosity of these inks. Add up to 15% by weight. Do not exceed recommended levels of reduction. Over reduction with retarder can result in blocking.

Reduce Drying: Use 5560 Fast Thinner to reduce drying times.

<u>Adhesion Promoter:</u> Use 5549 Binder Varnish to improve adhesion and rub resistance on absorbent stock.

Roller Coating: Use a blend of 50% 5549 Binder Varnish and 50% 5500 Thinner for roller coating applications. Percent calculations are measured by weight.



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Cleanup

<u>Screen Wash (Prior to Reclaim):</u> Use IMS201 Premium Graphic Screen Wash, IMS203 Economy Graphic Screen Wash, or IMS206 Graphic Auto Screen Wash.

<u>Press Wash (On Press):</u> Use IMS301 Premium Graphic Press Wash.

Storage

Store closed containers at temperatures between 65°-78°F (18°-25°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 applicable <u>Safety Data Sheet</u> (SDS / MSDS) for further instructions and warnings.

For assistance on a wide range of important regulatory issues, consult the following Regulatory Compliance Department link at http://www.nazdar.com or contact Nazdar Ink Technologies - World Headquarters (see contact listing at the end of this document).

Adhesion Testing

- Touch of ink surface the ink surface should be smooth.
- 2. Thumb twist the ink surface should not mar or smudge.
- 3. Scratch surface the ink surface should resist scratching.

Manufacturer's Product Offering

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

Printing Colors

Printing Colors have excellent opacity and flow characteristics.

Fluorescent Colors

These colors require special considerations due to their high pigment contents. Best results are achieved when printed through a mesh that offers more open area. These inks have the tendency to settle; so high speed mixing is required prior to printing. Fluorescent colors fade quickly with exposure to ultraviolet light and are not recommended when outdoor durability si required.

Special Effect Pigments

When inks are to be printed with a special effect color, all ink layers must be evaluated for intercoat adhesion before proceeding with the production run. Pigments may settle in the container; prior to printing, thoroughly mix the ink.

The following special effect pigments may be added to 5500 Series. Contact Nazdar for the item number(s) and availability of special effect products. Technical Data Sheets for each of the following special effect pigments can be found at www.nazdar.com.

<u>Metallic additives:</u> Chemical reactions in metallic inks may result in viscosity, color and printability changes over time; due to this, mix only enough metallic ink to be used the same day.

<u>Pearlescent / Interference:</u> Add up to 20% by weight.

Multi-Chromatic: Add up to 10% by weight.

Packaging / Availability

Contact your Nazdar distributor for product availability and offering.

'LF' Item Numbers

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

Standard Ink Items

Standard ink items listed below are inventoried in 1 kilogram and gallon containers.

Printing Colors

Item Number	Color
55LF02	Lemon Yellow



55LF04	Sign Red
5508	Radiant Ultra Blue
5511	Jet Black
5512	Opaque White
55LF14	Emerald Green
5515	Cobalt Blue
55LF18	Medium Yellow
55LF20	Fire Red
5530	Transparent Base
55LF33	Brilliant Light Orange
5536	Extender Base
55LF44	Scarlet Red
5554	Dark Peacock Blue
5561	Brilliant Pale Gold
5570	Bronze Liquid

5560	Fast Thinner
9050	Retarder Thinner

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Non-Standard Ink Items

Non-Standard ink items listed below are special order, non-inventoried colors which may require additional lead time. These items are available in gallon containers.

Printing Colors

Item Number	Color
55LF01	Primrose Yellow
5509	Midnite Blue
55LF16	Dark Green
5521	Rich Brown
55LF25	Cyanine Green
5526	Maroon
5546	Carmine Red
5547	Dark Royal Purple
5557	Raw Umber

Fluorescent Colors

Item Number	Color
5592	Mint Green
5594	Citron Yellow
5595	Poppy Red
5596	Golden Yellow
5597	Coral Pink
5598	Tropical Orange
5599	Galaxy Blue

Additives / Reducers

Item Number	Description
5500	Thinner
5549	Binder Varnish



Cleaners / Clean Up

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Item Number	Description
IMS201	Premium Graphic Screen Wash
IMS203	Economy Graphic Screen Wash
IMS206	Graphic Auto Screen Wash
IMS301	Premium Graphic Press Wash

Nazdar Quality Statement

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®.

Nazdar Ink Technologies Offices Worldwide

Nazdar Ink Technologies - World Headquarters

8501 Hedge Lane Terrace Shawnee, KS 66227-3290 USA Toll Free US: 866-340-3579 Tel: +1 913-422-1888

Fax: +1 913-422-2296

E-mail: NazdarOrders@nazdar.com

Technical Support E-mail: lnkAnswers@nazdar.com

Nazdar Limited – EMEA Barton Road, Heaton Mersey Stockport, England SK4 3EG Tel: + (44) 0-161-442-2111

Fax: + (44) 0-161-442-2001

UK Technical Service E-mail: technicalservicesuk@nazdar.com

Nazdar – Asia Pacific

11 Changi North Street 1 #03-03/04

Singapore 498823 Tel: +65-63854611 Fax: +65-65433690 E-mail: <u>aspac@nazdar.com</u>