Nazdar DA Series Nylon and Flock Screen Ink



v 9 EN

Ref: v 8 EN

DA Series is a two-part polymerizing screen ink that has been formulated to be extremely flexible and resistant to laundering and dry cleaning as well as ironing. DA Series is a highly opaque, extremely flexible and elastic ink for printing and flocking most synthetic and natural textiles, including waterproof nylon and other synthetics having a finish. (Pre-testing of waterproof nylon is recommended.)

Substrates

- Cotton
- Cotton blends
- **Synthetics**
- Waterproof Nylon
- Finished synthetics

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

110-200 tpi (43-79 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 500-600 square feet (46-56 square meters) per gallon depending upon ink deposit. Reference www.nazdar.com for examples of coverage calculations.

Printing

DA Series ink must be catalyzed with DA176 Catalyst before printing (see Common Performance Additives).

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 DA Series with other inks besides the DA Series.

Drying / Curing Parameters

DA Series ink will air-dry overnight for handling. DA Series may also be heat dried at 200°F (93°C) for 10 minutes. After drying, full crosslinking will be achieved in approximately seven days at ambient room temperature and low humidity (40% or less). The inks resistance to washing and dry cleaning will improve over that time.

DA Accelerator may be used to reduce the cure time (see Common Performance Additives).

Multiple layers of ink may require longer drying times than a single layer.

Clears / Varnishes

Mixing Clear: Use DA170 Clear to reduce the density of colors.

Common Performance Additives

Additives should be thoroughly mixed in the DA Series before each use. Prior to production, test any additive adjustment to the ink.

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

100g ink + 8g additive = 108g total

Thinner: Use RE188 Thinner to reduce the viscosity of these inks. Add up to 20% by weight.

Catalyst: DA176 Catalyst must be added at a ratio of 3.5 parts ink to one part catalyst by weight

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before printing. Catalyzed ink has a 3 to 5 hour pot life.

<u>Accelerator</u>: Use DA1882 DA Accelerator to reduce the curing time of the DA Series. Add 2 grams of accelerator to one quart of ink. Accelerator will reduce the catalyzed ink pot life to 2-3 hours.

Cleanup

<u>Screen Wash (Prior to Reclaim):</u> Use IMS401 Premium Textile Screen Wash.

<u>Press Wash (On Press):</u> Use IMS501 Premium Textile Press Wash.

Storage / Shelf Life

Store closed containers at temperatures between 65°-78°F (18°-25°C). Storing products outside of these recommendations may shorten their shelf life. Ink taken from the press should not be returned to the original container; store separately to avoid contaminating unused ink. DA176 Catalyst is sensitive to moisture and should be stored in a cool dry place.

Standard DA Series items are useable for a period of at least 48 months from the date of manufacture. To obtain the official shelf life letter, Contact Nazdar Technical Service at lnkAnswers@nazdar.com or see contact listing at the end of this document.

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).

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.

Standard Printing Colors

Standard Printing Colors have excellent opacity and flow characteristics. These colors are intended to work as supplied.

"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.

Color Card Materials

<u>CARDDA Color Selector Guide:</u> shows the Standard Printing Colors in the DA Series.

Packaging / Availability

Contact your Nazdar distributor for product availability and offering.

Standard Ink Items

Standard ink items listed below are offered in kilogram and/or gallon containers.

Printing Colors

| Item Number | Color |
|-------------|----------------|
| DALF104 | Bright Red |
| DA111 | Black |
| DA112 | White |
| DALF134 | Medium Yellow |
| DALF142 | Emerald Green |
| DA152 | Light Blue |
| DA156 | Brilliant Blue |
| DA170 | Clear |

Additives / Reducers

| Item Number | Color |
|-------------|----------------|
| DA176 | Catalyst |
| DA1882 | DA Accelerator |
| RE188 | Thinner |

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Cleaners / Clean Up

| Item Number | Color |
|-------------|-----------------------------|
| VF184 | Screen Wash |
| IMS401 | Premium Textile Screen Wash |
| IMS501 | Premium Textile 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: <u>NazdarOrders@nazdar.com</u>

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>