

Screen Ink

Nazdar 9500 Series AquaPrint II is a water-dispersible, lead/heavy metal-free pigmented screen printing ink. 9500 Series is designed to be press ready and can be further extended, for pastel shades, with the use of AQ51 Prepared Extender Base.

v 3 EN

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Substrates

- Cotton
- Cotton/Polyester blends
- Cotton/Rayon blends
- Acetate
- Some 100% Polyester and Lycra blends

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

60-156 tpi (24-61 tpcm) monofilament polyester mesh for most applications.

Stencil

Use Waterproof direct emulsions and capillary films. For hand cut stencils use lacquer or lacquer proof films.

Squeegee

60-80 durometer polyurethane squeegee.

Coverage

Estimated 800 square feet (240 square meters) per gallon depending upon ink deposit. Reference www.nazdar.com for examples of coverage calculations.

Printing

Nazdar 9500 Series AquaPrint II is formulated to be press ready. 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 drying 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 drying variables/conditions.

Only add enough ink to the screen to be able to print for 5 to 10 minutes. Add additional ink in small increments throughout the print run to maintain screen stability.

Nazdar does not recommend inter-mixing of Nazdar 9500 Series AquaPrint II with other inks besides the Nazdar 9500 Series AquaPrint II.

Drying Parameters

Nazdar 9500 Series AquaPrint II must be heat set for 3 minutes at 300° F (149 °C). Heat cure for 2.5 minutes at 320° F with good air flow in the oven. If necessary, the addition of AQ58 Aquacat may be used to achieve necessary fastness levels.

Clears / Varnishes

Mixing Clear: Use AQ51 Prepared Extender Base to achieve desired pastel colors.

Metallic Clear: Use 9540 Metallic Clear if metallic powders are needed.

Common Performance Additives

The market specific performance properties of the Nazdar 9500 Series AquaPrint II should be acceptable for most applications without the need for 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:

$$100\text{g ink} + 8\text{g additive} = 108\text{g total}$$

Water base Screen Ink

Screen Ink

AQ51 Prepared Extender Base: To be used with 8500 Super Pigment Concentrate to 95% maximum ratio or 5% can be added to our 9500 “ready for use” inks in instances when additional binders may be needed, such as with greater than normal pigment content.

AQ53 Thickener: A liquid that will increase the viscosity of prepared colors. Add at 0.5% increments to desired thickness.

AQ54 Aqualube: A retardant gel that slows down the evaporation rate of water, and hence prevents drying in the screen. Add at levels of 5-10% by weight, without fear of limiting pot life or jelling of the ink.

AQ55 Softener: A product that will impart a silky, soft feel to the print. Add at a level of 2-5% when printing terry towels.

AQ56 Penetrant: A product that simply aids penetration. Add to prepared inks at a level of 2-5% by weight. It works extremely well on “difficult to print” cloth, such as looped and sheared terry cloth towels.

AQ57 Antiwick: Used to prevent wicking on certain fabrics that may have surface treatments. Add at 0.5% increments up to a total maximum of 2% by weight.

AQ58 Aquacat: This aziridine-free room temperature catalyst, when used at a level of 3-5%, enables air-dried prints to achieve necessary fastness levels. The curing process will only start to take place once the prints are actually dry, so to speed up operations, print may be conveyor dried at approximately 250° F (121° C).

The use of AQ58 is ideally suited for print shops that may not have ovens with sufficient air flow in their heating chamber, or for those shops, who by increasing their belt speed, seek to increase production. Energy costs can be significantly reduced when using this product. The ink / catalyst mixture has a normal shelf life of 8 hours. Do not use the mixture after that period. Available in quart containers.

8500 Clear Concentrate: A basic clear concentrate for mixing with water and AQ52 low crock to provide the finished AQ51; and as such is used to regulate the viscosity of the system. High speed mixing equipment is required to use this product. Available in quart, gallon, and 5 gallon containers.

Cleanup

Screen Wash (Prior to Reclaim): Use IMS401 Premium Textile Screen Wash.

Press Wash (On Press): Use 2537 Screen Wash or IMS401 Premium Textile Screen 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.

Standard Nazdar 9500 Series AquaPrint II items supplied 1 gallon (4/5 kilo) containers or smaller are useable for a period of at least 24 months from the date of manufacture.

General Information**Ink Handling**

Wearing gloves and safety glasses are suggested in areas where ink may be splashed. If ink does come in contact with skin, wipe ink off with a clean, dry cloth (do not use solvent or thinners). Wash the affected area with soap and water. Consult the applicable Material Safety Data Sheet (MSDS) for further instructions and warnings.

For assistance on a wide range of important regulatory issues, consult the following Regulatory Compliance Department link at www.nazdar.com/health_safety.asp 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.

Packaging / Availability

Contact your Nazdar distributor for product availability and offering.

Nazdar 9500 Series Aquaprint II Ready-For-Use (RFU) Screen Ink



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Standard Ink Items

Standard ink items listed below are inventoried in gallon containers. Those marked with an * are available in quart and gallon containers. Those marked with ** are available in quart, gallon and 5 gallon containers and those marked with *** are available in gallon and 5 gallon containers.

Item Number	Color
9512***	RFU Blue 2G
9514**	RFU Red YR
9516	RFU Violet 4B
9517	RFU Scarlet LF
9518*	RFU Scarlet YDC
9519*	RFU Orange R
9520*	RFU Blue R
9525**	RFU White BR
9526*	RFU Fuchsia
9536	RFU Yellow 3RH
9541	RFU Aquatique White
9542**	RFU Yellow 2G
9543	RFU Navy
9544*	RFU Blue 3G
9546**	RFU Black L
9547	RFU Brown SR
9551*	RFU Red 2B
9565*	RFU A 1351 Aquapaque White
9560	RFU Aquapaque Clear Base

Additives

Additives are available in quart, gallon and 5 gallon containers.

Item Number	Item Description
AQ51	Prepare Extender Base
AQ53	Thickener
AQ54	Aqualube
AQ55	Softener
AQ56	Penetrant
AQ57	Antiwick
AQ58	Aquacat (only available in quarts)

Cleaners / Clean Up

Cleaners are available in gallon, 5 gallon and 55 gallon containers.

Item Number	Item Description
2537	Screen Wash
IMS401	Premium Textile Screen 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®.

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