

Versacon[®] Classic 5100 Solvent Screen Ink has been formulated for the decoration of treated polyethylene and treated polypropylene containers.

Versacon[®] Classic 5100 Series exhibits excellent resistance to a wide range of solvents, chemicals and products normally packaged in “poly” containers. A high gloss, fast drying, single part system, Versacon[®] Classic 5100 Series exhibits good adhesion immediately upon drying, while final properties will be achieved in 5-7 days.

SUBSTRATES Treated polyethylene and polypropylene containers

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 230-355 threads per inch (90-140 threads per centimeter) monofilament polyester mesh for most applications

STENCIL Solvent resistant direct emulsions and capillary films

SQUEEGEE 70-80 durometer polyurethane squeegee

COVERAGE 1200-3000 square feet per gallon depending upon ink deposit

PRINTING The 5100 Series ink may be thinned with RE185 Thinner or RE181 Retarder prior to use. 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.

Substrates must have a minimum surface energy level of 48 dynes/cm for optimum ink flow and adhesion.

Maintain ink temperature at 65°-90°F (18°-32°C). 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 The 5100 Series will air dry to touch in 8-15 minutes depending on the ambient conditions and screen mesh used. For best results, force drying at temperatures of 90°F - 180°F (32°C - 83°C) is recommended. Good air flow at proper temperature is the key to accelerating dry cycles to 30-40 seconds. Good air circulation is necessary to remove the vaporized solvents. Multiple layers of ink may require longer drying times than a single layer.

CLEAR/VARNISHES Mixing Clear / Metallic Mixing Clear: Use 5126 Mixing Clear to reduce the density of colors or as a clear base for specialty additives such as aluminum metallic powders.

Gold or bronze metallic powders are not recommended to be mixed with the 5126 Mixing Clear or other 5100 inks. The addition of gold or bronze powders inhibits cure and affects chemical resistance.

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 RE185 Thinner to reduce the viscosity of these inks. Add up to 15% by weight.

Retarder: Use RE181 Retarder to optimize on-screen stability in hot humid conditions. Add up to 15% by weight. The addition of retarder may extend drying time.

CLEAN UP

Screen Wash (Prior to Reclaim): Use IMS201 Premium 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 Versacon[®] Classic 5100 Series Material Safety Data Sheet for further instructions and warnings.

**ADHESION
TESTING**

1. Touch of ink surface – the ink will be smooth and slick.
2. Scratch surface – the ink will resist scratching.
3. 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**

The Standard Printing Colors have excellent opacity and flow characteristics.

**PANTONE
MATCHING
SYSTEM[®] BASE
COLORS**

The Pantone Matching System[®] Base Colors are used to simulate the Pantone[®] Color Formulation Guide. These inks can be used in matches to achieve Pantone[®] color simulations, or let down with mixing clear. The ColorStar[®] Color Management System software provides blend formulations using Pantone Matching System[®] Base Colors. These blend formulations are also available at www.nazdar.com.

**SINGLE
PIGMENT
TONERS**

The Single Pigment Toners may be used directly from the container or in color matches.

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.

The following special effect pigments may be added to the 5100 Series inks. These pigments are available in 1-pound containers. Contact Nazdar[®] for the item number(s) and availability of each special effect product.

Silver (aluminum) Metallic: add up to 8% 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. The use of metallic powders in the ink may reduce chemical resistance.

Pearlescents / Interference Pigments: add up to 20% by weight.

Multi-Chromatic Pigments: add up to 10% by weight.

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

Phosphorescents: Add up to 20% by weight.

Fluorescents: Add up to 25% by weight. Fluorescent colors fade quickly with exposure to ultraviolet light.

COLOR CARD MATERIALS

The following is a list of screen printed samples available.

Conventional Color Card: shows the Standard Printing Colors, and Pantone Matching System[®] Base Colors.

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

PACKAGING

All items listed below are available in one kilogram and gallon containers.

Stock Number	Standard Printing Colors	Stock Number	Pantone Matching System [®] Base Colors
5110	Primrose Yellow	51358	Tinting White
5112	Medium Yellow	51359	Tinting Black
5119	Fire Red	51360	Orange
5152	Super Opaque Black	51361	Yellow
5175	Super Opaque White	51362	Warm Red
5126	Mixing Clear	51363	Rubine Red
	Single Pigment Toners	51364	Rhodamine Red
5182	Carmine Toner	51365	Purple
5183	Magenta Toner	51366	Violet
5184	Maroon Toner	51367	Reflex Blue
5185	Green Toner	51368	Process Blue
5186	Blue Toner (GS)	51369	Green
5187	Blue Toner (RS)		
5188	Violet Toner		

PACKAGING

Additives/Reducers are available in gallon containers.
Cleaners are available in quart and gallon containers.

Stock Number	Additives/Reducers	Stock Number	Clean Up
RE181	Retarder	IMS201	Premium Graphic Screen Wash
RE185	Thinner	IMS301	Premium Graphic Press Wash

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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