

PA Series Poly-All Screen Ink has been designed specifically for screen printing on untreated polypropylene. Its unique formulation makes pretreatment such as flaming or surface coating unnecessary. Poly-All will perform satisfactorily on most polypropylene surface. However, since there is considerable variation in the formulation of substrate materials, the user must always pretest the specific substrate for adhesion and product resistance prior to a production run. PA Series inks exhibit a semi-gloss finish. When thoroughly dried, PA Series ink has very good flexibility and durability. Poly-All has proven successful in some pad printing applications.

SUBSTRATES Untreated polypropylene

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 230-305 threads per inch (90-120 threads per centimeter) monofilament polyester mesh for most applications

STENCIL Solvent resistant direct emulsions and capillary films

SQUEEGEE 70-80 durometer polyurethane squeegee

COVERAGE 1200-2500 square feet (111-232 square meters) per gallon depending upon ink deposit

PRINTING The PA Series ink may be thinned with PA7 Thinner. 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 temperatures 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 PA Series will air dry in 20 minutes or may be force dried in 15-25 seconds at temperatures from 90°F to 150°F (32°C to 66°C). Poly-All should “age” a minimum of 72 hours for maximum adhesion. 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 PA01 Clear to reduce the density of colors or as a clear base for specialty additives such as metallic powders.

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 PA7 Thinner to reduce the viscosity of these inks. Add up to 15% by weight.

Retarder: To improve on screen stability during hot climate conditions or for slower drying, a blend of PA7 Thinner (not more than 15% by weight) and PA8 Retarder (add up to 5% by weight) may be added to the ink.

Leveling Agent: Use FP460 Flow Promoter to reduce pinholes/air bubbles present in the printed ink film. Add up to 4 ounces per gallon.

CLEAN UP

Screen Wash (Prior to Reclaim): Use IMS201 Premium Graphic Screen Wash or 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 PA 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. 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

The Standard Printing Colors have excellent opacity.

MIXING COLORS

The Mixing Colors are recommended for use in color matching. The higher pigment concentration of these colors provides stronger colors with more opacity.

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.

The following special effect pigments may be added to the Poly-All inks. These pigments are available in 1-pound containers. Contact Nazdar for the item number(s) and availability of each special effect product. Pigments may settle in the container, prior to printing, thoroughly mix the ink.

Silver (aluminum) Metallic: add up to 8% by weight.

Gold (bronze) Metallic: 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 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 printed samples available.

Poly-All Color Card (Card PA): shows the Standard Printing Colors and Mixing Colors.

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

PACKAGING

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

| Stock Number | Standard Printing Colors | Stock Number | Standard Printing Colors |
|--------------|--------------------------|--------------|--------------------------|
| PA01 | Clear | PA46 | Permanent Blue |
| PA10 | White | PA49 | Purple |
| PA11 | Extra Opaque White | PA52 | Bright Red |
| PA21 | Yellow | PA53 | Deep Red |
| PA26 | Orange | PA54 | Maroon |
| PA30 | Emerald Green | PA60 | Brown |
| PA43 | Royal Blue | PA70 | Black |

PACKAGING All items listed below are available in kilogram and/or gallon containers.

| Stock Number | Mixing Colors | Stock Number | Mixing Colors |
|--------------------------------------------------------|------------------|--------------|---------------|
| PA310 | Green | PA510 | Rubine Red |
| PA440 | Process Blue | PA570 | Rhodamine Red |
| PA450 | Reflex Blue | PA580 | Magenta |
| PA500 | Warm Red | | |
| Halftone Colors (non-stock, 4-gal. minimum) | | | |
| 137195 | Halftone Base | | |
| 137196 | Halftone Cyan | | |
| 137197 | Halftone Magenta | | |
| 137198 | Halftone Yellow | | |
| 137199 | Halftone Black | | |

PACKAGING Additives/Reducers are available in liter and/or gallon containers.
Cleaners are available in 1-gallon, 5-gallon and 55-gallon containers.

| Stock Number | Additives/Reducers | Stock Number | Clean Up |
|--------------|--------------------|--------------|-------------------------------|
| PA7 | Thinner | IMS201 | Premium Graphic Screen Wash |
| PA8 | Retarder | IMS202 | Universal Graphic Screen Wash |
| FP460 | Flow Promoter | 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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