

PRODUCT INFORMATION

FEATURES

- ▶ Excellent printability and screen stability
- ▶ Fast curing
- ▶ Superior post print forming capabilities
- ▶ Excellent solvent / chemical resistance
- ▶ High gloss
- ▶ Resistant to yellowing with multiple bakes

SUBSTRATE Applications

- ▶ Primed Anodized Aluminums
- ▶ Acrylic, Enamel, Polyester, or Vinyl Coated Metals
- ▶ Many Epoxy Coated Metals
- ▶ Steel

THINNING

Stir well before every use. Polyset should be thinned 3%- 5% with Polyset Thinner (PS-TH).

MESH

Polyset prints well through 230 to 390 (90 to 154/cm) monofilament polyester fabrics.

STENCILS

Stencil materials must be solvent resistant.

CURING

Polyset is a thermosetting ink which requires a minimum substrate temperature of 320°F (160°C) for polymerization or cure. Polyset will not air dry.

When using a batch oven, Polyset will cure at 320°F to 350°F (160°C to 176°C) in 15 to 20 minutes. In high temperature conveyorized ovens, Polyset will cure at 350°F to 450°F (176°C to 232°C) in two to four minutes.

All cure temperatures are dependent on gauge and type of metal, ink film thickness, as well as type and condition of oven used. Caution should be used when curing Polyset at temperatures of 400°F to 450°F (204°C to 232°C). To achieve proper intercoat adhesion at these high temperatures, exposure time must be reduced.

Excessive immediate high temperatures without adequate air flow may result in a surface cure demonstrated by a matte or slight texture to the ink film surface.

Proper cure may be checked using 50 double rubs with methyl ethyl ketone (MEK) on a soft cloth without degrading the ink film finish.

COVERAGE

Standard colors should yield a coverage of 2,800 to 3,500 square feet/gallon (64 to 80 m²/liter) depending on film thickness.

WASH UP

Wash up on press with Xtend™ press washes and after the production run with Xtend™ ink degradants.

PRE-PRODUCTION TESTS

It is strongly recommended that all substrates be tested before use as supposedly similar substrates can vary between different manufacturers and even between different batches from the same manufacturer. Certain coatings may be impregnated with lubricants which, like plasticizer migration, may impair adhesion and block resistance even a considerable period after printing.

PS-OP Overprint Clear is not recommended for use as a primer/tie coat. PS-MX Mixing Clear can be used as a primer/tie coat. PS-OP is only to be used as an Over Print Clear for print protection.

END-USER MUST DETERMINE SUITABILITY OF THIS PRODUCT FOR THE INTENDED USE PRIOR TO PRODUCTION.

OUTDOOR USE

Polyset Overprint Clear (PS-OP) enhances color and gloss retention. Therefore, in order to achieve optimum outdoor durability, PS-OP must be printed over Polyset colors.

Accelerated weathering tests have been conducted on prints produced with Polyset and overprinted with Polyset Overprint Clear (PS-OP) in the QUV. Under these conditions, Polyset colors withstood 1500 hours of testing before significant color deterioration was evident. Accelerated machine weathering tests cannot be precisely related to actual outdoor performance but is considered that 1500 hours of exposure approximately equates to up to three years outdoor exposure in temperate climates.

COLOR AVAILABILITY

The Polyset is available in standard colors, base Seritone Matching System (SMS) colors, and the halftone colors.

HALFTONE COLORS

Polyset halftone colors are matched to "SWOP" standards (Specification Web Offset Publication). The densities are slightly higher than SWOP under most conditions and, therefore, offer scope for adjustment with the addition of halftone extender base.

SPECIAL MATCHES

Special colors can be supplied against prints, wet ink, PANTONE®* numbers, or other Nazdar Nazdar standard colors.

*Pantone, Inc's check-standard trademark for reproduction and color reproduction.

METALLICS

Polyset Mixing Clear (PS-MX) is recommended for use with all metallic powders. Recommended mixing ratios are 8% by weight of silver powder and 20% by weight of gold powder. Meshes should range between 230 and 305 (90 to 120/cm) monofilament polyester.

Due to the possibility of chemical changes after mixing, it is recommended that metallic shades are freshly mixed daily. For maximum exterior durability, a non-tarnishing gold powder and clear coat should be used.

STANDARD COLORS

ITEM	DESCRIPTION
PS-101	Primrose Yellow
PS-111	Lemon Yellow
PS-123	Med Yellow
PS-131	Brilliant Orange
PS-141	Premium Fire Red
PS-143	Standard Fire Red
PS-151	Scarlet Red
PS-155	Rubine Red
PS-160	Rhodamine Red
PS-175	Purple
PS-180	Warm Red
PS-185	Yellow
PS-190	Process Blue
PS-200	Peacock Blue
PS-205	Reflex Blue
PS-210	Ultra Blue
PS-215	Green
PS-221	Emerald Green
PS-231	Dark Green
PS-300	Black
PS-311	Opaque White

STANDARD COLORS (CONT)

ITEM	DESCRIPTION
PS-SB	Shading Black
PS-TW	Tinting White
PS-MX	Mixing Clear
PS-OP	Overprint Clear

HALFTONE COLORS

ITEM	DESCRIPTION
PS-HTY	Halftone Yellow
PS-HTR	Halftone Red
PS-HTB	Halftone Blue
PS-HTK	Halftone Black
PS-HTX	Halftone Extender Base

MATCHING SYSTEM COLORS

ITEM	DESCRIPTION
PS-064	SMS Yellow Green Shade
PS-066	SMS Yellow Red Shade
PS-114	SMS Orange
PS-127	SMS Violet
PS-164	SMS Red Blue Shade
PS-165	SMS Magenta
PS-230	SMS Blue Green Shade
PS-233	SMS Blue Red Shade
PS-325	SMS Green

Thinner

ITEM	DESCRIPTION
PS-TH	Thinner

STORAGE

Containers should be tightly closed immediately after use. At the end of long printing runs, surplus ink from the screen should be disposed of. Refer to Material Safety Data Sheet (MSDS) for materials and conditions to be avoided.

In the interest of maximum shelf life, storage temperatures should be between 50°F (10°C) and 77°F (25°C). When stored under these conditions the maximum shelf life is shown by the use by dates, which are clearly marked on all ink containers.

SAFETY AND HANDLING

Refer to MSDS for safety, handling, and waste disposal information.

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The information and recommendations contained in this Technical Data Sheet, as well as technical advice otherwise given by representatives of our Company, whether verbally or in writing, are based on our present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Technical Data Sheet out of date and users are requested to ensure that they follow current recommendations.