

Nazdar's NFX30's High Sparkle Glitter UV screen inks provide ready pre-mixed colors for graphic applications. The ultra transparency of the inks results in a saturated, vibrant color that does not dull the high sparkle, glitter effect.

SUBSTRATES Styrene, rigid vinyl, some pressure sensitive vinyl, polycarbonate, some acrylic, coated paper, and coated cardstock.

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 60-110 tpi (24-45 tpcm) monofilament polyester mesh for most applications
Higher mesh counts can result in filtering of the glitter flake. Lower mesh counts can result in under curing issues. See 'Cure Parameters' for more information.

STENCIL Solvent resistant, UV ink compatible direct emulsions and capillary films

SQUEEGEE 70-90 durometer polyurethane squeegee

COVERAGE 500-900 square feet (46-84 square meters) per gallon depending upon ink deposit

PRINTING NFX30's High Sparkle Glitter inks are formulated to be press ready. Thoroughly mix the ink prior to printing.
Maintain ink temperature at 65°-90° F (18°-32° C) for optimum print and cure performance. Pretest to determine optimum printing performance for a particular set of ink, substrate, screen, press, and curing variables/conditions.

CURE PARAMETERS NFX30's High Sparkle Glitter inks cure when exposed to a medium pressure mercury vapor lamp with millijoules (mJ) and milliwatts (mW) of:
170+ mJ/cm² @ 600+ mW/cm²
The use of a coarse mesh, a heavy ink deposit, or the addition of concentrate colors could require additional UV output. These guidelines are intended only as a starting point for determining cure parameters, which must be determined under actual production conditions.
"Undercuring" the ink may result in poor adhesion and higher residual odor.
To increase mJ levels, slow down the belt speed or scan speed. To increase mW levels, increase the wattage setting of the UV reactor. To optimize mJ and mW output, maintain the bulb and reflector condition and focus to the substrate.
The values mentioned above are representative of measurements taken using an EIT UVICURE Plus radiometer measuring the UVA bandwidth (320-390 nm). To obtain accurate mW readings with the UVICURE Plus, reduce the belt speed to less than 40 ft/min.

CLEAR / VARNISHES Mixing Clear: Use NFX31High Sparkle Silver Clear to reduce the density of colors and maintain the level of sparkle.

CONCENTRATED COLOR

Concentrated Color: Use the NFX21 to NFX29 Graphic Transparent colors to increase the color saturation. The addition of the NFX21 to NFX29 Graphic Transparent Colors will decrease the sparkle glitter concentration.

Note: UV curing levels must be increased to accommodate the higher degree of color saturation; in some cases, full curing may not be achieved. Pretest to determine curing conditions.

COLOR MATCHING

Changing the hue of the color can be achieved using two methods.

1) Mix the NFX31 to NFX39 High Sparkle Glitter colors to produce hues between the colors provided. Note: the resulting color is affected by the background color and should be taken into account when color matching.

2) Adjust the hue of the colors using the NFX21 to NFX29 Graphic Transparent Colors. This decreases the sparkle glitter concentration.

INTER-PRINT INKS

It is recommended to use NFX30's High Sparkle Glitter inks as only an overprint on the substrates outlined in the 'Substrate' section. NFX30's High Sparkle Glitter inks can be inter-printed with:

- PowerPrint® 1600 UV Ink Series
- PowerPrint® Plus1800 UV Ink Series
- PowerPrint® Banner1900 UV Ink Series
- PowerPrint® Renew1400 UV Ink Series
- 4000 UV Ink Series

Refer the inter-print ink's Technical Data Sheet for processing recommendations.

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 RE310 UV Reducer to reduce the viscosity of these inks. Add up to 5% by weight.

Adhesion Promoter: Use NB80 UV Adhesion Promoter to enhance adhesion on treated fluted-polypropylenes and some acrylics. Add up to 5% by weight. Improved adhesion will not be demonstrated for 24 hours, with full cross linking in 4-7 days. Ink mixed with NB80 UV Adhesion Promoter has a 4-8 hour pot life.

CLEAN UP

Screen Wash (Prior to Reclaim): Use IMS203 Economy Graphic Screen Wash or IMS207C Graphic Recirculating Wash.

Press Wash (On Press): Use IMS301 Premium Graphics 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.

PROCESSING

Finishing: Due to the heavy ink deposit of these inks, any finishing processing such as cutting through the ink film, scoring, bending, etc. should be qualified prior to any production printing.

Background Color: Due to the high transparency of the NFX30's High Sparkle Glitter inks, the background color will have significant effect on color of the end result and processing conditions.

GENERAL INFORMATION

INK HANDLING

Wear gloves and barrier cream to prevent direct skin contact. 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 reducer). Wash the affected area with soap and water. Consult the NFX30's High Sparkle Glitter inks Material Safety Data Sheet for further instructions and warnings.

NFX30's High Sparkle Glitter inks are a one-part, 100% solids UV-curable screen printing ink which does not contain N-vinyl-2-pyrrolidone (trade name V-Pyrol®).

ADHESION TESTING

Even when recommended UV energy output levels are achieved, it is imperative to check adhesion on a **cooled down** print:

1. Thumb twist – the ink surface will not mar or smudge.
2. Scratch surface – the ink surface will resist scratching. Gouging or excessive pressure when scratching into the ink surface could remove the surface in the scratched areas.
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.

WEATHERING / OUTDOOR DURABILITY

At full strength and properly cured, NFX30's High Sparkle Glitter colors are formulated to provide 1-2 years outdoor durability when mounted vertically in the Central U.S.A.

Outdoor durability cannot be specified exactly. Slight color change and loss of gloss should be expected. Variables affecting a printed part's durability include:

- Ink film thickness and degree of curing
- Color formulation:
 - Adding large amounts of mixing clear to any color
 - Mixing several colors to achieve a specific color
 - Mixing a small quantity of any single color with any other color
- Substrate type and age
- Mounting angle or directional orientation
- Geographical location
- Air pollution and exposure to excessive abrasion (for example, brush car washes)

PRODUCT OFFERING

HIGH SPARKLE GLITTER INKS

These colors are intended to work well from the container. Due to the large glitter flakes, bumps in the surface should be expected.

PACKAGING

All items listed below are available in gallon containers. These items are non-inventoried and made to order.

Stock Number	NFX High Sparkle Colors	Stock Number	NFX High Sparkle Colors
NFX31	High Sparkle Silver Clear	NFX36	High Sparkle Green
NFX32	High Sparkle Red	NFX37	High Sparkle Yellow
NFX33	High Sparkle Magenta	NFX38	High Sparkle Orange
NFX34	High Sparkle Violet	NFX39	High Sparkle Black
NFX35	High Sparkle Blue		



NFX30's HIGH SPARKLE GLITTER UV SCREEN INK

TECHNICAL DATA SHEET

PACKAGING

Additives/Reducers are available in liters or quarts. Contact customer service for availability.
Cleaners are available in gallon, 5 gallon and 55 gallon containers.

Stock Number	Additives/Reducers	Stock Number	Cleaners
NB80	UV Adhesion Promoter (liters only)	IMS203	Economy Graphic Screen Wash
RE310	UV Reducer	IMS207C	Graphic Recirculating Wash
RE308	UV Reducer	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.

Nazdar Worldwide Headquarters
8501 Hedge Lane Terrace, Shawnee, KS 66227-3290 USA
Toll Free: 866.340.3579 or Tel: 913.422.1888 Fax: 913.422.2296
e-mail: custserv@nazdar.com

Nazdar Limited
Barton Road, Heaton Mersey, Stockport, England SK4 3EG
Tel: + (44) 0.161.442.2111 Fax: + (44) 0.161.442.2001
e-mail: technicalservicesuk@nazdar.com

<http://www.nazdar.com>