JV Screen Ink

Nazdar NFX57 UV High Gloss Anti-Graffiti Clear Screen Ink

NAZDAR INK TECHNOLOGIES

(Formerly 664645PS High Gloss Anti-Graffiti)

v 1 EN Ref: v 1 EN

NFX57 UV High Gloss Anti-Graffiti Clear is designed to be used as an overprint clear to allow graffiti to be removed from the surface and to protect the underlying graphics from cleaners. This product is resistant to cleaners and solvents to allow for easy removal of graffiti. NFX57 is designed to be compatible over several inks; test for adhesion and printability over inks before use. Properly cured, this clear will be resistant to most common cleaning fluids; test for resistance properties prior to full scale production.

Substrates

- Pressure sensitive vinyl
- Coated papers
- Polycarbonate
- Static cling vinyl
- Rigid vinyl

Substrate recommendations are based on commonly available materials intended for the ink's specific market when the ink is 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

305-355 tpi (120-140 tpcm) monofilament polyester mesh.

Stencil

Use direct emulsions and capillary films which are solvent resistant and UV compatible.

Squeegee

70-80 durometer polyurethane squeegee.

Coverage

Estimated 3,200 – 4,200 square feet (295 - 390 square meters) per gallon depending upon ink deposit. Reference www.nazdar.com for examples of coverage calculations.

Printing

NFX57 UV High Gloss Anti-Graffiti Clear is formulated to be press ready. Thoroughly mix the ink prior to printing. Improper mixing can lead to inconsistent ink performance.

Maintain ink temperature at 65°-90°F (18°-32°C) for optimum print and cure 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.

The ink can be affected by stray UV light. Be aware of skylights, windows and overhead lights curing the ink in the screen; light filters are recommended. Leaving a container uncovered may result in the ink's surface forming a "skin", caused by reaction with ambient lighting. Keep containers covered.

Nazdar does not recommend inter-mixing NFX57 with other inks.

Interprintable Graphic Inks

The following ink series can be used with NFX57 Anti-Graffiti Clear on their appropriate substrates: PowerPrint® 1600 UV Ink Series, PowerPrint® Banner 1900 UV Ink Series, 4000 UV Ink Series, 4200 UV Ink Series, 3600 UV Ink Series and 3900 UV Ink Series. Shop conditions vary; pretest the interprintability of the graphic ink and NFX57 combination to determine optimum performance characteristics for a particular set of substrate, screen, press, and curing conditions.

Cleaning Printed Surface

The surface can be cleaned with 668550KI Graffiti Remover. Any graffiti remover products should be pre-qualified prior to full scale print production.

Cure Parameters

NFX57 cures when exposed to a single medium pressure mercury vapor lamp emitting millijoules (mJ) and milliwatts (mW) of:

90-110 mJ/cm² @ 600+ mW/cm² UVA

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, lower block resistance, poor chemical resistance, and higher residual odor.

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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, and ensure proper focus to the substrate.

These guidelines 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.

Additives

<u>Reducer:</u> Use RE307 UV Reducer to reduce the viscosity of this ink. Add up to 10% by weight.

Cleanup

<u>Screen Wash (Prior to Reclaim):</u> Use IMS201 Premium Graphic Screen Wash, IMS203 Economy Graphic Screen Wash, or IMS206 Graphic Auto Screen Wash.

<u>Press Wash (On Press):</u> Use IMS301 Premium Graphic Press Wash.

Storage / Shelf Life

Store closed containers at temperatures between 65°-78°F (18°-25°C). Storing NFX57 outside of these recommendations may shorten its shelf life. Ink taken from the press should not be returned to the original container; store separately to avoid contaminating unused ink.

NFX57 supplied in a 1 gallon container or smaller is useable for a period of at least 24 months from the date of manufacture.

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 applicable Safety Data Sheet (SDS / MSDS) for further instructions and warnings.

For assistance on a wide range of important regulatory issues, consult the following

Regulatory Compliance Department link at http://www.nazdar.com or contact Nazdar Ink Technologies - World Headquarters (see contact listing at the end of this document).

Adhesion Testing

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

- Touch of ink surface the ink surface should be smooth.
- Thumb twist the ink surface should not mar or smudge.
- Scratch surface the ink surface should resist scratching.
- 4. Cross hatch tape test per the ASTM D-3359 method, 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, and rip off at a 180 degree angle. Ink should only come off in actual cut areas.

Full adhesion characteristics at proper cure levels are demonstrated within 8 hours.

Manufacturer's Product Offering

Based on information from our raw material suppliers, NFX57 is 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.

Item Number	Color
NFX57	UV High Gloss Anti-Graffiti Clear

Thinner and Graffiti Remover

Item Number	Item Description
RE307	UV Reducer
668550KI	Graffiti Remover

Cleaners / Clean Up

Item Number	Item Description
IMS201	Premium Graphic Screen Wash
IMS203	Economy Graphic Screen Wash

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IMS206 Graphic Auto Screen Wash
IMS301 Premium Graphic Press 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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