

NSC17 Clear and NSC18 Black A+ Chalk Board UV screen inks provide a matte surface that can be written on with chalk and erased.

**SUBSTRATES** Styrene, rigid vinyl, pressure sensitive vinyl, coated papers, coated cardstocks

## 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** 156-195 tpi (45-77 tpcm) monofilament polyester mesh for most applications

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

**SQUEEGEE** 70-90 durometer polyurethane squeegee

### PRINTING

NSC17 Clear and NSC18 Black A+ Chalk Board 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. Lower temperatures increase the ink viscosity, impairing both flow and cure. Elevated temperatures lower the ink viscosity, reducing print definition, and film thickness.

Pretest to determine optimum printing performance for a particular set of ink, substrate, screen, press, and curing variables/conditions.

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

### CURE PARAMETERS

NSC17 Clear and NSC18 Black A+ Chalk Board inks cure when exposed to a medium pressure mercury vapor lamp set at 200 watts per inch with millijoules (mJ) and milliwatts (mW) of:

110-150 mJ/cm<sup>2</sup> @ 600+ mW/cm<sup>2</sup>

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.

Note: Porous substrates can allow ink to dive below the surface requiring a more thorough cure to overcome the added ink thickness.

### INTER-PRINTING SCREEN INKS

NSC17 Clear and NSC18 Black A+ Chalk Board inks are suitable to overprint the following UV screen ink series:

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

Refer to the Technical Data Sheet for the inter-printed ink to determine its processing recommendations.

Note: when inter-printing with any UV screen ink or digital ink, pre-test to determine suitable inter-printing adhesion and any finishing processing.

### 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 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

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 NSC17 A+ Chalk Board Clear Material Safety Data Sheet for further instructions and warnings.

NSC17 A+ Chalk Board Clear and NSC18 A+ Chalk Board Black are one-part, 100% solids UV-curable screen printing inks which do 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 should not mar or smudge.
2. Scratch surface – the ink surface should 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.



# NSC17 & NSC18 A+ CHALK BOARD UV SCREEN INKS

TECHNICAL DATA SHEET

## PRODUCT OFFERING

### PACKAGING

Special order items: the item listed below is non-inventoried which require minimum quantities and may include additional lead time.

This item is available in gallon containers.

Item Number	Item Description	Item Number	Item Description
NSC17 <i>(previously: 60021479FX)</i>	A+ Chalk Board Clear	NSC18 <i>(previously: 60024238FX)</i>	A+ Chalk Board Black

### PACKAGING

Cleaners are available in gallon containers.

Item Number	Cleaners
IMS203	Economy Graphic Screen Wash
IMS207C	Graphic Recirculating Wash
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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