# 676856PS MAGNETIC RECEPTIVE UV SCREEN INK

**TECHNICAL DATA SHEET**

Magnetic Receptive UV Screen Ink can be used on various substrates to produce a surface coating that will attract a magnet. The ink deposit, printed surface area, and thickness of the magnet contribute to the level of attraction. Magnetic Receptive UV Screen Ink is only suitable for flat substrates; folding, flexing, etc. may cause cracking in the ink layer. The ink itself is non-magnetic.

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| **SUBSTRATES** | Rigid Styrene, Polycarbonate, Some Coated Card Stock |

## 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.*

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| **MESH** | Generally, 156-200 mesh depending UV output and required ink deposit. Several overprinted layers may be required to achieve the required magnetic attraction. Coarser mesh counts can be used, but full cure must be achieved. |
| **STENCIL** | Solvent resistant, UV ink compatible direct emulsions and capillary films |
| **COVERAGE** | 2,000-2,100 square feet (185 - 195 square meters) per gallon through a 156 mesh depending upon ink deposit. |
| **PRINTING** | Magnetic Receptive UV Screen Ink is formulated to be press ready. Thoroughly mix the ink prior to printing.<br>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, film thickness and opacity.<br>Pretest to determine optimum printing performance for a particular set of ink, substrate, screen, press, and curing variables/conditions.<br>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. Light filters are recommended. |
| **CURE PARAMETERS** | For an ink deposit through a 156 mesh, 130-180 mJ and 600+ mW are required. Overprinting dark backgrounds will adversely affect the cure results. These guidelines are intended only as a starting point for determining cure parameters, which must be determined under actual production conditions.<br>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.<br>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 readings with the UVICURE Plus, reduce the belt speed to less than 40 ft/min. |
| **STORAGE** | Inks react to light and temperature. 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. |

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| **PROCESSING** | *Overprinting:* The Magnetic Receptive UV Screen Ink can be overprinted with Nazdar PowerPrint 1600 UV Screen Ink Series. Overprinting the magnetic receptive surface decreases magnetic attraction, please pretest.<br>*Finishing:* The ink deposit is very rigid. Care should be taken to prevent rolling, bending or folding. It is not recommended to die cut or guillotine cut through the ink surface. When guillotine cutting, stacks should be very short to prevent potential bending. |

## GENERAL INFORMATION

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| **INK HANDLING** | Direct skin contact to UV inks is the primary route of exposure and irritation. Therefore, it is recommended that all personnel handling these products 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 Magnetic Receptive UV Screen Ink Material Safety Data Sheet for further instructions and warnings.<br>Magnetic Receptive UV Screen Ink is a one-part, 100% solids UV-curable screen printing ink and 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:<br>1. Touch of ink surface – the ink surface will be smooth.<br>2. Thumb twist – the ink surface will not mar or smudge.<br>3. Scratch surface – the ink surface will resist scratching. Cardstock scratches easily, so use magnification to determine if scratches are ink only or ink and top layer of substrate.<br>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.<br>Full adhesion characteristics are demonstrated within 24 hours after cure. |
| **PRINTED MATERIALS** | *Nazdar Magnetic Receptive print sample (LITO124):* shows the Magnetic Receptive UV Screen Ink printed 3 layers. |
| **PACKAGING** | The Magnetic Receptive UV Screen Ink is available in gallon containers. |

*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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