8900 Series SuperSet Thermo-Set Screen Ink is a high solids, high gloss solvent-based screen ink. A single component, cross linked product, 8900 Series is formulated for printing on pre-coated metal surfaces. Properly cured, 8900 Series exhibits excellent resistance to many solvents, chemicals, humidity and abrasion. 8900 Series is specifically designed to provide maximum flexibility and intercoat adhesion.

| **SUBSTRATES** | Pre-coated metal substrates; coatings include enamel, polyester, acrylic, vinyl and epoxy |

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** | 230-305 tpi (90-120 tpcm) monofilament polyester mesh for most applications |

| **STENCIL** | Solvent resistant direct emulsions and capillary films |

| **SQUEEGEE** | 70-80 durometer polyurethane squeegee |

| **COVERAGE** | 1,200-1,800 square feet (111 - 167 square meters) per gallon depending upon ink deposit |

| **PRINTING** | To achieve proper ink flow, 8900 Series ink may be thinned (see Additives section). Add only enough ink to the screen to be able to print for 5-10 minutes. Add additional ink in small increments throughout the print run to maintain screen stability. Thoroughly mix the inks prior to printing. |

Maintain ink temperatures at $65°$-$90°$F ($18°$-$32°$C) for optimum print drying performance. Lower temperatures increase the ink viscosity, impairing both flow and drying. Elevated temperatures lower the ink viscosity, reducing print definition, film thickness and opacity.

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

| **DRYING** | Once the metal substrate has reached the required temperature listed in the schedule below, maintain that temperature for the appropriate time per the schedule. This will vary according to the thickness of the substrate and the specific drying equipment used. Proper cure is achieved when the ink will resist 40-50 double rubs using methyl ethyl ketone (MEK), showing no loss of gloss or degradation to the printed ink. Slight color transfer to the rubbing cloth or cotton swab is acceptable as long as the print surface retains its initial characteristics. |

Temperature	Time
275°F (136°C)	15 min.
300°F (150°C)	8 min.
325°F (164°C)	6 min.
350°F (178°C)	4 min.
375°F (192°C)	3 min
400°F (206°C)	2 min.

CLEARS / VARNISHES	*Mixing Clear / Metallic Mixing Clear:* Use 8926 Mixing Clear to reduce the density of colors or as a clear base for specialty additives such as Metallics. *Overprint Clear:* Use 8927 Overprint Clear to provide added surface abrasion, chemical resistance and extend durability to colors.
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 RE187 Reducer to reduce the viscosity of these inks. Add up to 15% by weight. The 8900 Series does not require a retarder or slow thinner. *Gloss / Flattening Paste:* Use 8948 Flattening Paste to reduce gloss. Add up to 20% by weight.
CLEAN UP	*Screen Wash (Prior to Reclaim):* Use IMS202 Universal Graphic Screen 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	All personnel mixing and handling these products must wear gloves and eye protection. Clean up spills immediately. If ink does come in contact with skin, wipe ink off with a clean, dry, absorbent cloth (do not use solvent or thinner). Wash the affected area with soap and water. Consult the 8900 Series Material Safety Data Sheet for further instructions and warnings.
ADHESION TESTING	1. Touch of ink surface – the ink will be dry. 2. Thumb twist – the ink surface will not mar or smudge. 3. Scratch surface – the ink will resist scratching. 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.

PRODUCT OFFERING

STANDARD PRINTING COLORS	Standard Printing Colors have excellent opacity and flow characteristics.
SPECIAL ADDITIVES	When inks are to be printed over a special effect color, the overprinting ink(s) must be evaluated for intercoat adhesion before proceeding with the production run. To maximize intercoat adhesion, specialty colors should be printed as late as possible in the print sequence. Pigments may settle in the container; prior to printing, thoroughly mix the ink. The following special effect pigments may be added to the 8900 inks. These pigments are available in 1-pound containers. Contact Nazdar for the item number(s) and availability of each special effect product. *Metallics:* Mix only enough metallic ink to be used the same day. Chemical reactions in metallic inks may result in viscosity, color and printability changes over time.

COLOR CARD MATERIALS	The following is a list of screen printed samples available.

CARD375 Conventional Color Card: shows the Standard Printing Colors.

PACKAGING	All items listed below are available in gallon containers.

'LF' ITEM NUMBERS	Colors with an item number containing 'LF' indicate a lead-free alternative that replaced a lead containing color. All colors listed in this document are lead-free.

Stock Number	Standard Printing Colors	Stock Number	Standard Printing Colors
89LF10	Primrose Yellow *(formerly 8915 Permanent Primrose Yellow)*	8921	Peacock Blue
89LF11	Lemon Yellow	8922	Ultra Blue
89LF12	Medium Yellow	8924	Black
89LF13	Emerald Green	8925	White
89LF18	Scarlet Red	8926	Mixing Clear
89LF19	Fire Red	8927	Overprint Clear
89LF20	Brilliant Orange	8975	Super Opaque White

PACKAGING	Additives/Reducers are available in gallons. Cleaners are available in gallons, 5 gallon and 55 gallon containers.

Stock Number	Additives/Reducers	Stock Number	Clean Up
RE187	Thinner	IMS202	Universal Graphic Screen Wash
8948	Flatting Paste	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