



Suggested Uses:

The MIR Series is a first surface ink recommended for use on HDPE, LDPE (container and flat sheet), flat sheet polypropylene, fluted polyolefins, PVC, polycarbonate, PETE, PETG, most decal materials, many polyesters (print treated and top-coated), paper, card stocks, styrene, and most acrylics. It is the responsibility of the end user to pretest all substrates with Norcote® products prior to use in production.

Product Features

- Mirror-like finish
- Fast Curing
- Excellent adhesion to multiple materials including **flat sheet and container plastics**
- Very good scratch resistance

Printing Recommendations:

All inks should be thoroughly mixed prior to use. Inks are supplied at print ready viscosity for most applications. Not recommended for second surface printing. Do not microwave this product.

Mesh:

A mesh count of 380-420 threads per linear inch (150-165 cm²) low elongation, monofilament polyester is suggested. Tension should range from 18-25 N/cm² on a rigid frame.

Stencil:

All direct emulsions and thin capillary films (15-25µ before application) compatible with UV inks are acceptable.

Squeegee:

A sharp 80 shore durometer polyurethane squeegee is preferred. Inks can be printed with durometers ranging from 60-90 as well as dual durometer squeegees.

Curing Parameters:

MIR Series inks cure only when exposed to UV light of the proper wavelength. They are fast curing and work well with one 300 watts/in (120 watts/cm) or two 200 watt/in (80 watts/cm) focused medium pressure mercury vapor lamps with millijoules (mJ) and (mW) of: 200 mJ/cm² @ 600 + mW/cm² minimum.

Curing speeds depend on several factors including ink film thickness and the energy level of the lamps.

MIR inks should be cured immediately after printing to obtain the optimum finish.

Screen Cleaning:

Most conventional solvent cleaners work well. Alcohol based solutions must be avoided as they break down the emulsion. Norcote recommends Press Wash 110 (flash point 113° F), 140 (flash point 140° F) or NSW-824 (flash point 150° F). These products are used for cleaning ink off screens during on press color changes or before storing the screen. They work well when removing ink from squeegees, flood bars and other equipment. Contact us for packaging options.

Coverage:

Approximately 2,500 square feet per gallon (230 square meters per gallon) depending on printing variables affecting ink film thickness and coverage.

Mixing:

All Norcote MIR Series should be mixed by hand only. Power mixing could have a negative impact on the mirror_like effect.

Precautions:

Avoid direct contact of ink with skin and clothing. If contact occurs, wash affected area with warm soapy water and dry thoroughly. If eye contact occurs, irrigate the area with water for 15 minutes and consult a physician. For more specific information, refer to the relevant Material Safety Data Sheet.

Adhesion:

The MIR Series is a nonvisual post-curing system. Although further cross-linking occurs up to 24 hours later, the MIR Series inks should pass a crosshatch tape test, (ASTM #D3359-97), using 3-M 600 tape after exiting the curing unit and cooling to room temperature.

Weatherability:

MIR series is not a weatherable ink. Consult the Technical Service Department prior to use for information regarding weather resistance of the MIR Series inks.



Chemical/Scuff Resistance:

The MIR Series inks are not meant for scuff, chemical or water resistance at this time. The MIR ink is currently undergoing Chemical resistance testing. Additional information will be published upon completion.

Additives:

No additive recommended. Call Tech Support with questions about additives.

Color Range:

Specific colors can be matched at Norcote® against prints, wet ink or PANTONE® numbers.

Standard Colors:

First Surface Silver Mirror's:

*MIR8-3430-40 *MIR8-3430-60 *MIR-90-12G

*MIR-ADC-14V1 *MIR-GL-14 *MIR-GOLD 03

*Contact Technical Service for Recommended substrates.

Materials Tested For - MIR90-V14

PETG
Tekra Melinex .007
Tekra PET Clear Marnot .010
Tekra Makrofol DE 1-4 .010
Autotex V87XE
PVC 2
Clear Sta^oc Vinyl
Makrofol DE 1-1
GE Fire Retardant Lexan .010
Lexan HP92-5 .015
GE Glass Velvet Lexan 8A35
8010 Lexan
Acrylic
Tekra Bayfol CR6-2 .010
GE 8010 Lexan .020
Autotex F87
Autotex F6
GE Lexan 8A35V .010
HDPE Black
Polyester
PVC 1
Formacell Expanded PVC
Coroplast Yellow
Tekra PET .005
GE Lexan HPRS .010
PSV
Koma 3 mm Expanded PVC
Oracal 751 Cast Vinyl
Cel^oc 3 mm Expanded PVC
Sintra 3 mm Expanded PVC



Storage & Available Warranties:

All UV MIR Series inks should be stored in tightly closed, black polyethylene containers in an area with the temperature not to exceed 90° F (32.2° C). Avoid direct sunlight and indirect white light. Excess ink from print runs should be stored in separate containers to avoid contamination and is not covered under any warranty. When stored under these conditions, Norcote warrants the Products shall be free from defects in material and manufacture for a period of 3 months from the date of manufacture.

This Technical Bulletin is intended to be used for informational purposes only, and is in no way intended to create any warranties or other obligations on behalf of Norcote. All warranties, terms and/or conditions for a particular product will be specified on the applicable invoice and are only valid upon the creation of a legally-binding contract.

Testing:

Due to the inability of Norcote to anticipate or control the conditions under which the Products and information relating thereto will be used and/or stored, Norcote cannot guarantee the results obtained from using the Products. Any Suggested Uses are merely representative, and because the final product will depend on a number of specific factors, the end user should pretest all substrates with the Products prior to use in production.

*PVC Plastics:

Decoration can aggravate embrittlement properties of PVC plastics which can lead to cracking and failure of the plastic. It is strongly recommended that the end user contact the polymer manufacturer to obtain information on the suitability for decorating with a UV ink as well as recommendations for molding / processing to reduce this potential. As every situation can not be tested for in a laboratory environment, it is the responsibility of the end user to determine the suitability of the products chosen for an end application.

Revision: 05-03-2019
Supersedes: 10-22-2017