Suggested Uses:
The LED MSK was designed for use where second printing is required. The LED MSK series inks are suitable for use in many industrial graphic applications and are compatible with most pressure sensitive adhesives.

For additional information, please contact Technical Service. It is the responsibility of the end user to pretreat all substrates with Norcote® products prior to use in production.

Product Features
- Adhesive compatible
- Quick curing
- Excellent adhesion
- One part

Recommended Substrates:
- Polycarbonate
- Polyester (Treated)

Printing Recommendations:
All inks should be thoroughly mixed prior to use. Inks are supplied at print ready viscosity for most applications. If adjustment is needed the LED MSK-070 Thinner or LED MSK-000 Clear can be used to thin the ink. Do not microwave this product. Note that very high or low temperatures can change the ink's viscosity. This in turn can affect flow properties, print definition and the color opacity of the ink.

Mesh:
A mesh count of 305 threads per linear inch and higher (120 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:
Curing speeds depend on several factors including ink film thickness, energy level of the lamps and distance to the substrate. Norcote LED MSK inks will cure using:
- 8-12 watt/cm LED units
- 395 nm light source

Always test the inks under your printing conditions.

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

Intercoat Adhesion:
The LED MSK second surface series inks intercoat adhesion is very good. Although loss of intercoat adhesion is difficult, it should be monitored throughout the production run especially when printing 6 or more passes. Use of additives may adversely affect intercoat adhesion.

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. Note: Coverage, cure and color are affected by the mesh count, screen tension, squeegee durometer and other press variables.
Die-Cutting/Embossing:
LED MSK series inks are very flexible, providing excellent results under most embossing or die-cutting conditions.
To obtain acceptable results, inks must pass a cross-hatch tape test before embossing. Inks with special effects pigments may not emboss easily. High stress embossing of metallic ink is not recommended.

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.

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

Standard Colors:
- Mixing Clear: LED MSK-000
- Overprint Clear: LED MSK-049
- Mixing White: LED MSK-002
- Opaque White: LED MSK-1046
- Mixing Black: LED MSK-005
- Opaque Black: LED MSK-1019
- Radiant Yellow: LED MSK-012
- Medium Yellow: LED MSK-017
- Permanent Orange: LED MSK-019
- Radiant Orange: LED MSK-020
- Opaque Yellow: LED MSK-2233
- Lightfast Yellow: LED MSK-2313
- Lightfast Orange: LED MSK-2872
- Red: LED MSK-022
- Rhodamine Red: LED MSK-023
- Rose: LED MSK-024
- Magenta: LED MSK-026
- Emerald Green: LED MSK-030
- Spruce Green: LED MSK-031
- Permanent Blue: LED MSK-034
- High Density Permanent Blue: LED MSK-434
- Opaque Process Blue: LED MSK-2021
- Violet: LED MSK-035
- Reflex Blue: LED MSK-037
- Peacock Blue: LED MSK-038
- Process Blue: LED MSK-050

* May not be suitable for lightfast applications and is not recommended for prolonged exposure to direct sunlight.

* Special lead times will apply

Additives:
Check the Norcote Additives list for the products compatible with this ink series. The list is available on our website at www.norcote.com or call us at 800-488-9180 to receive a copy.

Storage & Available Warranties
All LED MSK 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 freezing. Do not store ink below 32° F. 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 one (1) year from the date of sale for the LED MSK Series standard inks, with no additives, and for a period of one (1) month from the date of sale for any custom color containing Day Glo® JZB or T-Powder. Norcote will not warrant any custom colors containing metallic pastes or any inks intermixed with competitor products. Any warranties provided will be limited to the price paid for the actual products used which give rise to the warranty claim.

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.