

Suggested Uses:

The DM Series is recommended for compact and optical disc applications. **It is the responsibility of the end user to pretest all substrates with Norcote® products prior to use in production.**

Product Features

- NVP/Amine Free
- Excellent Rheology
- Very Opaque
- High Gloss
- Fast Curing
- Abrasion Resistant
- Good Intercoat Adhesion

Printing Recommendations:

All inks are supplied at print-ready viscosity, but should be thoroughly mixed prior to each use. If adjustment is needed the UVOTH Thinner can be used to thin the ink. **Do not microwave this product.**

Mesh:

Mesh counts of 305-460 threads per linear inch (120-180 cm²) low elongation, monofilament polyester is suggested. Tension should range from 20-25 N/cm² on a rigid frame.

Stencil:

All direct emulsions and thin capillary films (15-25 μ 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 70-90 as well as dual durometer squeegees.

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:

Ink coverage is approximately 20,000-25,000 discs per U.S. gallon using a 390 tpi (150/cm.) plain weave mesh with a 34 micron thread diameter.

Curing Parameters:

Norcote® DM Series inks cure only when exposed to UV light of the proper wavelength. Curing speeds depend on several factors including ink film thickness and the energy level of the lamps. Ink should be cured immediately after printing. DM Series inks are fast curing and work well with one focused 300 watt/in (120 watts/cm) medium pressure mercury vapor lamp. The DM Series inks will cure up to 90 discs per minute with most focused UV curing units.

Adhesion:

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

Intercoat Adhesion:

DM Series inks intercoat adhesion is excellent. NOTE: Intercoat adhesion should be monitored throughout the production run especially when printing 6 or more passes. Use of additives may adversely affect intercoat adhesion.

Mixing:

All Norcote® DM colors are intermixable. The addition of any other ink series will alter the physical and chemical characteristics of the DM Series ink

Precautions:

Gloves and / or barrier cream is recommended when handling UV inks. Safety glasses are suggested, particularly for areas where ink may be splashed. If skin contact occurs, wash affected area with soap and water-do not use solvents or thinners.



Weatherability:

Weather resistance is subject to conditions of use. Consult the Technical Service Department prior to use for information regarding weather resistance and weatherable applications of the DM Series inks.

Metallic Colors:

Most metallic pigments work well with the DM-055 Thick Clear. The ability to cure a suspension is related to pigment load and UV exposure. Select mesh with openings large enough to transfer the metallic pigments of choice; generally a mesh count of 305 threads per inch (120/cm) or lower is required. Metallic pigments will reduce the shelf life of DM Series ink mixtures. RECOMMENDATION: Mix only enough metallic ink for one day.

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.

Color Range:

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

Standard Colors:

High Speed White	DM-1056
Opaque White	DM-1066
2 G High Speed White	DM-1076



Universal Thinner	UVOTH
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Fluorescent Colors/JZB's:

Aurora Pink (Blue shade)	11 B
Aurora Pink (Yellow shade)	11 Y
Rocket Red	13
Fire Orange	14
Blaze Orange	15
Arc Yellow	16
Saturn Yellow	17
Signal Green	18
Horizon Blue	801
Corona Magenta	21

Metallics:

Gold Paste	040	•(See Note)
Silver Paste	042	
Red Gold Paste	044	
Copper Paste	046	
Rich Gold Ink	240	
Silver Ink	242	

• 040 paste should be stored between 18C-35C to avoid solidification. If this occurs, reliquify the paste by placing it in an area with temperatures of 25C-35C.

Storage & Available Warranties

All UV DM 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 one (1) year from the date of sale for the DM 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

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