### Suggested Uses:
The 02 Series works well on soft vinyls (French calf, suedene, patent, etc.), most decal materials and some polyesters (print treated and top-coated). Note * pg 4. This series works especially well when heat sealing and flexibility are required. It is the responsibility of the end user to pretest all substrates with Norcote® products prior to use in production.

### Product Features
- Abrasion Resistant
- Chemical Resistant
- Heat-Sealable
- Opaque
- Quick Curing
- Embossable
- Resistant to Blocking
- Good Intercoat Adhesion

### 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 02-070 Thinner or 02-000 Clear for powders can be used to thin the ink. **Do not microwave this product.**

#### Mesh:
A mesh count of 305-355 threads per linear inch (120-140 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 Equipment:
02 Series inks 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 for most colors and clears.
- 300 mj/cm² @ 600 + mW/cm² minimum for opaque colors (blacks, whites, tans, grays, metallics, etc.).

### 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® 02 Series colors are intermixable. Addition of any other ink series will alter the physical and chemical characteristics of the 02 Series ink.

### 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 02 Series is a nonvisual post-curing system. Although further cross-linking occurs up to 24 hours later, the 02 Series inks should pass a cross-hatch tape test, (ASTM #D3359-97), after exiting the curing unit and cooling to room temperature. Maximum chemical and abrasion resistance and adhesion will be attained after 24 hours. The use of 074 Adhesion Promoter may improve adhesion and surface durability on selected materials.

Intercoat Adhesion:
02 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 5 or more passes. Use of additives may adversely affect intercoat adhesion.

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 02 Series inks.

Heat-Sealing/Embossing:
The 02 Series inks are formulated specifically to produce excellent results under controlled heat-sealing conditions. To obtain acceptable results the 02 Series inks must pass a crosshatch tape test, using 3-M 600 tape, before heat sealing or embossing. Highly pigmented (opaque) inks and inks with special effects pigments may not heat-seal or emboss well. Radio frequency heat-sealing or high stress embossing of metallic ink is not recommended. For further details contact the Norcote Technical Service Department.

Chemical Resistance:
The 02 Series inks have been exposed to a variety of chemicals to determine chemical resistance. The 02 Series has proved to be resistant to most common chemicals when properly cured.

Process Colors:
02 Series Halftone Process inks were designed for 4-color process printing. Color density can be adjusted with the addition of process toners or 060 Halftone Base. To achieve a minimum ink deposit, thus reducing pile height and dot gain, one should use a minimum stencil thickness.

Metallic Colors:
Most metallic pigments work well with the 02-000 Clear for Powders. 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 dramatically reduce the shelf life of 02 Series ink mixtures. RECOMMENDATION: Mix only enough metallic ink for one day.

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

Standard Colors:
- Clear for Powders 000
- Lens Clear 1085
- Mixing White 002
- Opaque White 1046
- Non-Chalking White 1054
- Non-Chalking Opaque White 1056
- White 1234
- Mixing Black 005
- Opaque Black 1019
- Jet Black 4000
- Brown 007
- Radiant Yellow 012
- Medium Yellow 017
- Opaque Yellow 2233
- Lightfast Yellow 2313
- Permanent Orange 019
- Lightfast Orange 2872
- Red 022
- Rhodamine Red 023
- Rose 024
- Magenta 026
- Emerald Green 030
- Spruce Green 031
- Permanent Blue 034
- Violet 035
- Reflex Blue 037
- Peacock Blue 038
- Overprint Clear 049
- Process Blue 050
- Opaque Process Blue 2021 *

* Special Order – 3 US gallon minimum, 48 hour lead time

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

Process Colors:
- Halftone Base 060
- Halftone Process Cyan 080
- Halftone Process Magenta 081
- Halftone Process Yellow 082
- Halftone Process Black 083

Transparencies:
- Transparent Red 092
- Transparent Green 093
- Transparent Blue 094
- Transparent Yellow 095
- Lt LED Red 2286
- Dk LED Red 2287

* All transparencies have limited intercoat adhesion
### 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.

### 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.

### 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
Storage & Available Warranties
All UV 02 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 02 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.

*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.