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NATUREPROOF™

Solvent Surface Ink

Toyo Ink America. LLC An artience group company

1225 N. Michael Drive Wood Dale, IL 60191 USA Tel: 630-930-5100

www.artience-toyoinkamerica.com

Product Overview

NATUREPROOF™ inks were developed for high-speed printing of polyolefin substrates.

NATUREPROOF™ is intended for heavy duty bag applications for lawn and garden products; where a high degree of fade, moisture and chemical resistance are needed. It has excellent gloss, scuff resistance, ammonia resistance, acid resistance, water resistance and heat resistance.

Technical Data

- Substrates: NATUREPROOF™ works successfully on heavy-gauge polyethylene film.
- Solvent Reducer Recommendations:
 - -Normal: 85/15 n-propyl alcohol/n-propyl acetate
 - -Fast: 85/15 ethanol/n-propyl acetate
 - -Slow: 75/15/10 n-propyl alcohol/n-propyl acetate/slow glycol ether
 - -Run the fastest combination consistent with clean printing to assure low solvent retention levels and non-blocking properties.
- Plate Material: Photopolymer or natural rubber.
- Ink Storage: 50°F to 100°F in provided containers, out of direct sunlight.
- Anilox: Line: 200 to 400 ls, Process: 400 to 800 ls
- Recommended Printing Viscosity: Line colors: 18 to 25" #2 Zahn, Process colors: 25 to 32" #2 Zahn
- **Printing Performance Testing:** The NATUREPROOF™ inks have passed the Scotts® Testing Specifications. These tests are designed to provide an accelerated test method for predicted outside storage durability; however, they are not a substitute for actual outside testing. The tests include the following:
 - Fade and Color Permanency A list of projected Sunlight equivalent is available from the United States Bureau of Standards.
 - Coefficient of Friction (COF)
 - o Dry rub resistance
 - Wet rub resistance
 - Picking resistance
 - Acid/alkali resistance

Cautions:

- The printed ink film thickness will have an effect on the final print properties.
- Color matches and color tints will change the fade and color permanency results.
- The materials packaged can affect the final print properties and color permanency.
- All migratory types of packaged materials used should be tested before commercially printing the job.

Physical Characteristics

- Passes 1,000-1,600 hours of QUV accelerated outdoor and weather resistance testing in lab controlled conditions
- Superior color strength
- · Excellent wet rub and wet block resistance
- Good gloss
- Good flexibility and adhesion
- Excellent printability
- Excellent heat resistance
- · Excellent block resistance

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- Excellent stability
- Excellent resolubility allows for clean running of fine type and screen applications.
- Excellent resistance to acidic and alkaline lawn and garden products
- · Good rub, scratch, and mar resistance
- HAPs and PFAs free
- Moderate to high COF
- NC base blendable

Colors Available

NATUREPROOF™ inks are formulated to have a maximum pigment load while maintaining a low consistent viscosity. It is based on bleed resistant and permanent pigments. PANTONE® approved bases & mixes are available from several locations. Color computer- controlled bases, matched to any standard, are available for customers who have dispensers already in place and wish to avoid changing the database. Inks can be supplied to DE specifications to meet the most stringent customer demands. Due to the high pigment strength of the system, it may require an extender addition to the ink.

- White
- G/S Yellow
- R/S Yellow
- Orange
- Y/S Red
- Quinacridone Red
- B/S Red Cyan Blue
- Cyan Green
- Carbazole
- Violet
- Black
- Extender

For technical assistance, call 1-979-778-1538.

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