

The W400 Series Water-Base Laminating Ink is specifically formulated to meet the demands of today's Narrow Web Label converters. The W400 Series Water-Base Laminating Ink features:

- ❖ High Speed Printing
- ❖ Easy to use
- ❖ High Color Strength
- ❖ Compatible with Water-base and UV Adhesives
- ❖ Fast Drying
- ❖ Available in 3 bcm, 4 bcm, and 5 bcm
- ❖ Process Colors available for 1.0 bcm to 2.0 bcm

SUBSTRATES

Pressure sensitive vinyl, top coated and print treated polyester, BOPP films, coated paper and board.

Note: As with all film substrates, lots may vary and testing is recommended before use.

USER INFORMATION

Anilox Volumes – Recommended 3.0 bcm - 5.0 bcm

Viscosity – On average 14-25 sec., #3 Zahn @ 77°F

pH Range – 9.0 – 10.0

Printing – The W400 Series inks have excellent adhesion to a wide variety of Substrates. Surface energy should be at least 38 dynes/cm to achieve proper adhesion. The use of in line, on press corona treatment can increase the dyne level of most substrates.

Listed below are other tips to consider during the printing process:

1. **Viscosity too high** – An addition of 2 – 3 ounces at a time of CARE73 Stabilizer will reduce the viscosity without reducing color strength too quickly.
2. **Increase Dry Rate** – A mixture of Isopropyl Alcohol/Water (50%/50%) will help increase the dry rate. Care should be used in premixing the Isopropyl Alcohol and Water first to avoid shocking the ink.
3. **Decrease Dry Rate** – The addition of RE199 Slow Reducer in increments of 1% up to 5% is used to slow down dry rate.
4. **Color too Strong**–Additions in the amounts of 2%-5% at a time of Transparent White can be used to reduce color strength without reducing viscosity. Record all adds to inks along with the amounts.

5. **Ink foaming**–The addition of CARE 83 Defoamer in small amounts to the ink pan will help reduce foaming. (Add a half a capful to end of the journals or 1 capful per gallon to the pump container). Too much CARE83 can cause pinholes in the print.
6. **Increase pH**–Add 1% of CARE79 PH Adjuster to the ink pan or pump container. The pH of the inks should be maintained between 9.0-10.0. Let adds mix for a few minutes to ensure they have been mixed thoroughly into the ink. If inks have been allowed to set in the pan or pump for extended time, viscosity and pH should be checked and adjusted if necessary.
7. Clean anilox rolls on a regular basis. Use a brass brush for Chrome rolls and a stainless brush for ceramic rolls.

GENERAL INFORMATION

STORAGE

Always store ink in a tightly closed container. Ink storage of 6 months should not affect the print quality. Longer periods of storage, simply open the container and add 1-2 ounces of Film Print Aid and stir or shake well.

Adhesion Testing- Use 610 / 810 Tape

INK HANDLING

Safety glasses and gloves are suggested in areas where product may be splashed. If product does come in contact with skin, wipe ink off with a clean, dry cloth (do not use solvent or reducer). Wash the affected area with soap and water. Consult the W400 Series Material Safety Data Sheet for further instructions and warnings

PRODUCT OFFERING

Standard Printing Colors – The W400 Laminating Series is available in 3 ranges of standard printing colors when using a 3bcm, 4bcm and 5bcm anilox rollers. There is also a set of (FR) colors.

4 Color Process- The W400 Series 4 color process inks are designed to print with anilox rollers having 1-2 bcm. W400 is also available in fade resistant (FR) colors.

Fade Resistance- The W400 Series Ink offers a line of Fade Resistant colors. These colors are designated with (FR) in their descriptions.

ADDITIVES

CARE83 Defoamer- Designed to be poured directly into an ink to stop foaming. It is recommended to add ½%-1% into the ink when needed. Do not add more than 1% or pinholes in the print may occur.

CARE79 PH Adjuster-Designed to replace the Amines that are lost due to evaporation on long press runs. PH Adjuster is compatible with most Water-base ink, which has a PH range of 9.0-10.0. PH Adjuster should be used on long press runs where ink had been maintained with water.

CARE73 Stabilizer-Designed to reduce the viscosity, replace the Amines, and water lost due to evaporation.

CARE77 Film Print Aid- Formulated for Film Ink System to raise the PH and slow down drying without lowering the viscosity of the ink. Film Print Aid will aid in cleaner print, less build up on the plates by increasing the re-wetability of an ink.

ADDITIVE PERCENTAGE

	1 Qt. = 32 oz.	½ Gal. = 64 oz.	1 Gal. = 128 oz.	5 Gal.= 640 oz.
1%	.32 oz.	.64 oz.	1.28 oz.	6.40 oz.
2%	.64 oz.	1.28 oz.	2.56 oz.	12.80 oz.
3%	.96 oz.	1.92 oz.	3.84 oz.	19.20 oz.
4%	1.28 oz.	2.56 oz.	5.12 oz.	25.60 oz.
5%	1.60 oz.	3.20 oz.	6.40 oz.	32.00 oz.

The following products are available in 3bcm, 4bcm and 5bcm. Part numbers for the 3bcm and 4 bcm are listed below. Part numbers for the 5 bcm are not shown but are available upon request.

Standard Colors	3bcm/PN	4bcm/PN
Opaque White	W400308	W400408
Black	W400309	W400409
Transparent White	W400010	W400010
Yellow	W400311	W400411
Orange	W400312	W400412
Warm Red	W400313	W400413
Rubine Red	W400314	W400414
Rhodamine Red	W400315	W400415
Purple	W400316	W400416
Violet	W400317	W400417
Reflex Blue	W400318	W400418
FR Process Blue (BW8)	W400319	W400419
FR Green (BW8)	W400320	W400420

Fade Resistant Colors	3bcm/PN	4bcm/PN
FR Yellow (BW6)	W400321	W400421
FR Orange (BW6)	W400322	W400422
FR Warm Red (BW6)	W400323	W400423
FR Rubine Red (BW6)	W400324	W400424
FR Rhodamine Red (BW8)	W400325	W400425
FR Purple (BW8)	W400326	W400426
FR Violet (BW8)	W400327	W400427
FR Reflex Blue (BW8)	W400328	W400428
Process Colors	Part No's	
Process Yellow	W400041	
Process Magenta	W400042	
FR Process Yellow (BW6)	W400051	
FR Process Magenta (BW6)	W400052	
FR Process Cyan (BW8)	W400053	
FR Process Black (BW8)	W400054	
Process Extender	W400090	
Additives		
Stabilizer	CARE73	
PH Adjuster	CARE79	
Defoamer	CARE83	
Film Print Aid	CARE77	
Reducers		
Slow Reducer	RE199	
Cleaner		
EZ Cleaner	NCW10	

Nazdar® stands behind the quality of this product. Nazdar® cannot, however, guarantee the finished results because Nazdar® exercises no control over individual operating conditions and production procedures. While technical information and advice on the use of this product is provided in good faith, the User bears sole responsibility for selecting the appropriate product for their end-use requirements. Users are also responsible for testing to determine that our product will perform as expected during the printed item's entire life-cycle from printing, post-print processing, and shipment to end-use. This product has been specially formulated for flexo printing, and it has not been tested for application by any other method. Any liability associated with the use of this product is limited to the value of the product purchased from Nazdar®.

Based on information from our raw material suppliers, these products are formulated to contain less than 0.06% lead. If exact heavy metal content is required, independent lab analysis is recommended.

Nazdar 8501 Hedge Lane Terrace, Shawnee, KS 66227-3290
 Toll Free: 866.340.3579 Phone: 913.422.1888 Fax: 913.422.2296
<http://www.nazdar.com>; e-mail: custserv@nazdar.com