

Ultrabond WR is distinct in its ability to offer non-blocking, flexibility needed for banner applications with additional adhesion to many Point-Of-Purchase stocks. This versatility provides screen printers an opportunity to reduce ink inventory by stocking a single ink line. Unlike other multi-purpose inks, Ultrabond's exceptional flexibility and adhesion stands up to the demand of the most stringent finishing requirements.

## Performance Properties

- Adhesion to a wide variety of substrates
- High hide opacity provides better color trapping
- Low tack finish for easy handling
- N-VP and heavy metal free
- Suitable for sewing, grommets and die-cutting
- Water and abrasion resistant

## Recommended Substrates

- ABS
- Card Stock and Paper
- Expanded Foam PVC (Sintra®, Celtec®)
- Fluted Polyolefin's\* & Treated HD Polyethylene Sheet
- Many Coated Metals
- PETG
- Polycarbonate (adhesive not recommended)
- Polyethylene Banner
- Polystyrene
- Pressure Sensitive Vinyl
- Print Treated Polyester
- Tyvek
- Unsupported Vinyl

\*With the use of Adhesion Promoter (3% 11939), UltraBond WR will adhere to fluted polyolefins such as Coroplast®. Best adhesion forms after a six (6) hour post cure. The modified ink's shelf life is at least 3 days. This adhesion promoter also provides excellent water resistance. Plastic stock should have a surface treatment level of 40 dyne or higher.

## Curing/Processing Guidelines

The WR UltraBond system when properly cured develops an extremely versatile high gloss, water resistant ink film. Even though the cured ink film has been engineered to optimize processing and handling, the printer must assume responsibility for pre-testing and qualifying the parameters for stacking printed parts prior to each run. The intensity of cure, weight or caliper of the material and/or elevated ambient temperatures and humidity of the printing and storage environments will influence block resistance.

Under curing of WR UltraBond can radically affect the physical properties of the inks. Do not expose stacks of printed materials to environments that may introduce high levels of moisture and water. Printed materials must be stored in a dry area. It is also recommended that additional precautions be made for shipping by truck as temperatures in trailers can exceed 160°F, 70°C.

## Light Fastness

At full strength and cured properly, WR colors are formulated to withstand up to three years of exterior exposure with clear. Factors that will alter the outdoor durability of the ink include but are not limited to: substrate grade/age, poor cure of the ink film, formulas, directional positioning, ink film deposit, exposure to excessive abrasives and air pollutants.

Care should be taken when reducing the mass tone\* colors with clear or tinting white as this could negatively affect the exterior durability of the color. Colors that should not be used for outdoor applications are: CMS 164 BS Red, CMS 114 Orange, 180 Warm Red and 131 Brilliant Orange. Automotive grade color alternative recommendations are available by calling our Technical Services Department.

\*Mass tone: the full product color without dilution.

## Printing

Mix well prior to use. While supplied in press ready condition, WR may be reduced up to 10% with #6494 Thinner. Care should be taken to print the ink at optimal temperature 70 - 90° F (21 - 27° C). Cool ink will heavier viscosity and will not flow properly. Hot ink will be lower in viscosity resulting in poor definition and decreased opacity.

## Coverage

3,200 to 3,600 square feet per gallon based on ink deposit .40 - .60 mil dependent on color and printing conditions.

## Storage

Care should be taken to store ink in tightly closed containers located in a cool (60-80°F/15-27°C) dark place. After long production runs excess ink from the screen should be properly disposed. With suitable conditions, unopened ink is expected to have a shelf life of approximately twelve (12) months from date of manufacturer.

## Metallic's

Use the Metallic Mixing Clear to prepare metallic ink as its increased viscosity helps insure a good particle suspension.

## Recommended mixing ratios, by weight are:

- 28% gold paste
- 12% silver paste

For optimum coverage and opacity, 280-305 (110 - 120cm) plain weave mesh. Use WR Overprint Clear for extended weather ability and to improve the non-tarnishing properties of the product.

## Additives

- 6494 Thinner - Use up to 10% as needed
- 11939 Adhesion Promoter, 3-5% as needed

## Precautions



# Ultrabond WR

Read the safety data sheet prior to processing. It contains instructions for precautions to be taken when handling inks. If ink comes in contact with skin wipe off with a clean, dry cloth (do not use solvent). Wash and rinse the affected areas with soap and water.

## Process Printing

For superior halftone reproduction, halftones are available in a range of density levels. Additional control of density may be achieved with use of GP HT Base. For best results, use 380 (140cm) or finer and a smooth, thin stencil coating should be utilized with process printing.

	Press Ready	High Density	Backlit Density
WR Halftone Yellow	0.90	1.10	1.35
WR Halftone Magenta	1.40	1.75	2.05
WR Halftone Cyan	1.40	1.80	2.20
WR Halftone Black	1.60	2.00	2.25

## Color Availability

Ultrabond WR is available in opaque standard colors. Custom matches, metallic, fluorescent and transparent colors are obtainable upon request.

WR-101 Primrose Yellow	WR-210 Ultra Blue
WR-111 Lemon Yellow	WR-220 Emerald Green
WR-123 Medium Yellow	WR-225 Forest Green
WR-131 Brilliant Orange	WR-226 Lime Green
WR-135 Vivid Orange	WR-235 Teal
WR-141 Fire Red	WR-240 Purple
WR-151 Scarlet Red	WR-260 Brown
WR-155 Rubine Red	WR-301 Opaque Black
WR-160 Rhodamine Red	WR-311 Opaque White
WR-180 Warm Red	WR-312 Jet Black
WR-190 Process Blue	WR-026 Brilliant White
WR-200 Peacock Blue	WR Mixing/Overprint Clear
WR-205 Reflex Blue	WR Metallic Mixing Clear

## A. Warranty Liability Limited to Purchase and Installation Costs

Notwithstanding anything provided herein or any other written material to the contrary, Polymeric only warrants the purchase price and costs of installation. POLYMERIC SHALL HAVE NO LIABILITY OR OBLIGATION TO ANY USER, BUYER, PURCHASER, DISTRIBUTOR OR OTHER PERSON OR ENTITY FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED, INCLUDING WITHOUT LIMITATION, PERSONAL INJURY, LOSS OF BUSINESS, LOSS OF PROFIT, OR OTHER DAMAGE, whether or not buyer shall have informed Polymeric of the possibility or likelihood of any such damages.

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## C. A Pretest Prior to Production is Recommended to Ensure Proper Suitability for the Intended Application.

## Pantone Matching System® Colors

The nine PANTONE® approved Color Matching System (CMS) shades are used to simulate the PANTONE® Color Specifier colors. Formulas were designed for maximum opacity and are available in book or Imaging Color source Software formats

WR-064 CMS GS Yellow	WR-066 CMS RS Yellow
WR-114 CMS Orange	WR-121 CMS YS Red
WR-164 CMS BS Red	WR-165 CMS Magenta
WR-127 CMS Violet	WR-230 CMS Blue
WR-325 CMS Green	WR Tinting White
WR Shading Black	WR Mixing/Overprint Clear

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We strongly recommend testing complete construction as per shop conditions prior to full production. MIX WELL BEFORE USE. Follow the directions on the package, ask for the safety data sheets and always follow the directions contained therein.

**Important** – Only the correct use of the product will allow satisfactory results. For this reason, closely related to the product supplied, Polymeric must decline all direct and indirect responsibility for the proper or improper use of the product. Make certain that product is right for the desired use, work according to the instructions given in our technical data sheets. Before use contact our Technical Service in case of doubt.

