

ULTRABOND BF PRODUCT DATA SHEET

Ultrabond BF is distinct in its ability to offer non-blocking and flexibility needed for banner applications while also providing adhesion to many point-of-purchase stocks. This versatility provides screen printers an opportunity to reduce ink inventory by stocking a single ink line for most applications. Ultrabond BF's exceptional flexibility and adhesion will stand up to the demand of the most stringent finishing requirements. Ultrabond BF provides a durable, non-blocking surface and has excellent outdoor durability.

PERFORMANCE PROPERTIES

- ➡ Broadest adhesion range of any Inktech/Polymeric UV ink
- → Flexible for sewing, grommeting and die-cutting without cracking
- → Allows double face printing without re-wetting or picking
- → Superior opacity provides better color trapping

- **▶** Low tack finish to eliminate slip sheeting
- → Water and abrasion resistance
- → NVP and heavy metal free

<u>RECOMMENDED SUBSTRATES</u>

- → Vinyl and Polyethylene Banner
- ➡ Electrostatic Vinyl
- → Pressure sensitive vinyls
- Unsupported Vinyl
- Polystyrene

- → ABS
- **▶** PETG
- → Tyvek
- → Many Coated Metals
- Card Stock and Paper
- Print Treated Polyester
- Expanded Foam PVC
- → Polycarbonate (without adhesives)
- *Fluted Polyolefins (with BF-1534)

CURING SPECIFICATIONS

Ultrabond BF will cure well when printed through 355 plain weave polyester mesh or finer. Ultrabond BF's optimal cure window of 125 - 160 mJ / 550 - 650 mW is generally achieved with one 200 watt per inch mercury vapor lamp at belt speeds between 75 - 100 feet per minute. Cure speeds may vary as thicker gauge stocks and dark surface colors require more energy. Adhesion should be a minimum of 95% from curing unit with final adhesion developing within four hours of initial polymerization. Coarser fabrics can be utilized; however, curing parameters may need to be adjusted for the increased ink film. If a loss of gloss or adhesion due to insufficient cure is noticed, the addition of 5 - 10 % BF Mixing Clear will increase light penetration and improve cure. Addition of thinner will not improve cure and may cause the cure rate to decrease. Intensity of cure, weight or caliper of the material as well as elevated ambient temperatures and humidity of the printing and storage environments can influence the block resistance of stacked prints.

* It is the printer's responsibility to pre-test and qualify the parameters, prior to each run.

COVERAGE

Ultrabond BF will yield an average of 3600 to 3800 sq. ft. per gallon based on film deposit of 0.40 to 0.60 mil, dependent on color and printing conditions.

SQUEEGEE

A 70-90 Durometer polyurethane blade is recommended.

INK MODIFICATION

BF Mixing Clear may be added to reduce opacity thus increasing cure speed. BF Mixing Clear is not recommended for viscosity reduction. UV Universal Thinner is recommended for viscosity reduction. It is not recommended to exceed 10% by total weight as this will reduce cure rate and may affect adhesion.

LIGHT FASTNESS

At full strength and fully cured, BF Series ink has been formulated to withstand 2-3 years of exterior exposure. The use of Overprint Clear will increase the inks outdoor durability. Factors beyond our control that may negatively impact the outdoor durability expectations include but are not limited to: substrate grade/age, poor cure of ink film, directional positioning, ink film deposit, exposure to excessive abrasives and air pollutants.

^{*}A minimum of 40 Dynes of surface energy is recommended for Polyolefin stock.

METALLICS

BF Metallic Mixing Clear is supplied for use in mixing metallic powders and pastes. The increase in viscosity of Metallic Mixing Clear helps insure a good particle suspension and maintain a good premix shelf life. The recommended mixing ratios are 8% by weight of silver powder and 20% of gold powder or 12% of silver paste and 28% of gold paste. For optimum coverage and opacity, 280-305 meshes are recommended. With the use of BF Overprint Clear, extended weatherability and improved non-tarnishing properties can be achieved.

COLOR AVAILABILITY

Ultrabond BF is available in twenty standard opaque colors and nine Color Matching System shades. Inktech's Color Formulating Guide reproduces over 1,000 colors utilizing the CMS shades. Custom matches, fluorescent, metallic and transparent colors are available upon request.

STANDARD COLORS

COLOR MATCHING SYSTEM COLORS

BF-0101	Primrose Yellow	BF-0205	Reflex Blue	BF-0064	CMS GS Yellow
BF-0111	Lemon Yellow	BF-0225	Forest Green	BF-0066	CMS RS Yellow
BF-0123	Medium Yellow	BF-0226	Lime Green	BF-0114	CMS Orange
BF-0131	Brilliant Orange	BF-0210	Ultra Blue	BF-0121	CMS YS Red
BF-0135	Vivid Orange	BF-0220	Emerald Green	BF-0164	CMS BS Red
BF-0141	Fire Red	BF-0235	Teal	BF-0165	CMS Magenta
BF-0151	Scarlet Red	BF-0240	Purple	BF-0127	CMS Violet
BF-0155	Rubine Red	BF-0260	Brown	BF-0230	CMS Blue
BF-0160	Rhodamine Red	BF-0301	Opaque Black	BF-0325	CMS Green
BF-0180	Warm Red	BF-0311	Opaque White	BF-0110	Shading Black
BF-0190	Process Blue	BF-1350	Overprint Clear	BF-0112	Tinting White
BF-0200	Peacock Blue	BF-1710	Metallic Mixing Clear	BF-1700	Mixing Clear
UV -1800	Thinner		-		-

PROCESS COLORS

Ultrabond BF four color process colors exceed "SWOP' standards. Variation in densities may be achieved with the use of BF Halftone Base.

	High Density	Back-lit Density
BF-Halftone Yellow	1.10	1.35
BF-Halftone Red	1.75	2.05
BF-Halftone Blue	1.80	2.20
BF-Halftone Black	2.00	2.25
BF-Halftone Extender Base		

FLUORESCENT COLORS

Ultrabond BF is available upon request in nine shades of fluorescent colors. Fluorescent pigments are not light stable. For maximum brightness and color stability, 260 – 305 mesh count is recommended.

BF-0900	Magenta	BF-0940	Chartreuse	BF-0970	Pink
BF-0910	Orange/Red	BF-0950	Red	BF-0980	Orange
BF-0920	Green	BF-0960	Orange/Yellow	BF-0990	Blue

CAUTION:

Read Material Safety Data Sheet prior to using.

End user must determine suitability of this product for the intended use prior to production.

Always premix prior to use.