PRODUCT INFORMATION BULLETIN

PLHE1070 EF LB DIAMOND WHITE

UNION INK™

EF LB Diamond White PLHE1070 is legendary for its excellent to superior bleed resistance and coverage. Diamond achieves a smooth hand with creamy to medium body. Its printability is good to great and can be used on a wide range of blends. This ink provides best in class dye resistance when a low-bleed ink is needed for challenging to general purpose printing. Diamond white prints well as an under base or stand alone white. While Diamond white can be used with most any plastisol, this ink's finish matches Brite Cotton White and Premium Poly White.

Highlights

- Medium gloss, smooth, bright white appearance.
- Superior bleed resistance.
- Fast flashing with low tack.
- Improved viscosity stability.
- Matches EF Brite Cotton White.
- Widely considered a "must-have" ink for decades.

Compliance

- Non-phthalate
- Internationally compliant
- Visit https://www.avientspecialtyinks.com/services/compliance-support

Precautions

- The information above is given in good faith and does not release you from testing inks and fabrics to confirm suitability of substrate and application process to meet your customer standards and specifications.

Printing Tips

- It is best practice to "pre-shear" ink before use. Do this by "Slicing and folding" the ink with an ink knife. Do not mix with power drill, friction heat from mechanical mixers other than a "Turn about" style mixer will thicken up the ink body.
- Because of the excellent printing characteristics of Diamond White it may be printed as an underbase through mesh counts as high as 230 (92 metric). Caution: Thinner ink deposits reduce bleed resistance.
- For the best coverage, bleed resistance and brightest print, adjust the off-contact distance and squeegee pressure to print the ink layer on top of the fabric rather than penetrating through it.
- PLHE-1070 / 1075 will fully cure when the entire thickness of the ink deposit reaches 300°F (149°C). PLHE-1070 is a superior quality low-bleed ink. To enhance the ability to prevent dye migration, flashing should be the minimum time and temperature necessary to surface cure the ink.
- It has been noted that Diamond white becomes stiffer and harder to print as the product ages, do not add any reducer to Diamond if you can avoid it as this will effect dye blocking. Instead, transfer a smaller amount of ink into a smaller vessel and pre-shear vigorously with a stiff ink knife until the body loosens. If you feel like the ink is too stiff to stir- start with a smaller amount, get it moving, and add more.

Recommended Parameters

Fabric Types

Cotton/Poly blends

Flash & Cure


Flash: Flash 220°F
Cure: 60 seconds at 320°F

Clean Up

Standard plastisol cleaners, press wash, or ink degradant

Mesh

Count: 125-230(48-92 metric)
Tension: 18-35n/cm3

Pigment Loading

Not recommended

Health & Safety

Find safety information here:
www.avient.com/resources/safety-data-sheets
or contact your local CSR

Squeegee

Durometer: Medium: 70 or 60-90-60
Profile: Square
Stroke: x2 stroke, medium speed
Angle: 10-20%

Additives

Reducers not recommended
Nylobond 10-15%
PLRE-9000 Reducer 5%
PLRE-9100 Reducer 2%

Stencil

Standard Emulsion
Off Contact: 1/16" (2mm) or greater
Emulsion Over Mesh: 15-20%

Storage

65 -95° F (18 -35° C)
Avoid direct sunlight.
Use within one year of receipt.
Keep container well sealed.

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