



Technical Data Sheet

Apocalypse ULT Colors

Non-Phthalate

Description: Apocalypse ULT colors are a non-phthalate, lead free, High Opacity, bright, high performance colors that have excellent coverage on dark garments. The low tack formula allows printing through finer mesh counts without the use of viscosity modifier. ULT Colors perform well on both automatic and manual presses. Has excellent bleed resistance for printing on polyester without the need of an underbase.

Substrate: 100% Polyester Performance fabrics. Tri-blends, Polyester Blends, Cotton, Nylon, Stretch fabric, lycra/spandex blends, and Polypropylene. Hot peel transfer paper. *Not suitable for all nylon substrates, pretest prior to production.

- Features:**
- Creamy plastisol ink
 - Smooth Athletic Finish
 - Fast Flash
 - Excellent Opacity
 - Excellent Bleed Resistance
 - No under base needed on most colors
 - Good stretch

Physical Properties:	Wet Ink Tack	Low
	Surface Appearance	Satin Finish
	Bleed Resistance	Excellent
	Opacity	High
	Gel point	160 °F
	Flash Temp & Time	220° - 240°F
	Fusion Temp	270°F - 300°F
	Squeegee Blade	70° - 80° durometer
	Mesh Count	86 – 230 mc in

Performance: Print Apocalypse ULT Colors straight from the container through mesh ranging from 86 to 230 mc without modifications of the viscosity. Use finer mesh counts for softest hand and good opacity. Stir before use.

Storage and Handling: 65°F to 95°F avoid direct sunlight. **Never exceed temperatures above 95°F during storage.**



Technical Data Sheet

Apocalypse ULT Colors

Non-Phthalate

Recommendations: Stir plastisol ink before printing. Any modifiers and additives should be mixed in clean containers using clean mixer blades and ink knives. Any contamination from other ink sources could make the ink test positive for restricted phthalates. Do not dry clean, iron or bleach the printed image.

Perform fusion tests before production. Failure to cure ink properly can result in poor wash fastness, inferior adhesion, and unacceptable durability.

Adjust flash cure temperature and dwell time so ink is just dry to touch. Avoid excessive flash temperatures to protect fabric and migration of dyes. If surface is hot and tacky, the ink film has been over flashed. Reduce temperature or time to prevent an inter-coat adhesion problem.

Curing is a time and temperature process, a lower oven temperature setting with a slower belt speed while maintaining recommended ink cure temperature is always best to protect fabric, control dye migration and reduce energy consumption.

Monarch Apocalypse ULT Colors can be cured between 270°F - 300°F. Running at the higher end of the temperature range and/or longer dwell times maybe required to achieve proper cure on jobs that contain cotton, high ink deposits or heavy weight garments.

***Note:** Poorly dyed polyester or too much heat in the curing process can overcome any low bleed inks ability to block the migration. For sever migration use a grey barrier base underlay.

Monarch Color does not knowingly add plasticizers containing the phthalates listed and outlined in California Bill 1108, CPSC HR-4040 and Oeko-tex Standard 100. The plasticizers identified may include di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP) benzyl butyl phthalate (BBP), diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), di-n-octyl phthalate (DnOP), (DIBP), Di-iso-butyl, and (DMP) Dimethylphthalate, including esters of ortho-phthalic acid and are not direct ingredients in the manufacture of Monarch plastisol direct to fabric screen printing inks. Monarch does not test the final product for amounts of the above mentioned phthalate plasticizers and esters and advises users to conduct testing for their intended use.

(Revised 3/29/19)