
RENEGADE SATIN (RES) PRODUCT DATA SHEET

Renegade (RES) series is a high performance, satin finish, fast curing Ultra Violet screen printing ink specifically formulated for point of purchase printing where a wide variety of substrates are used. The unique versatility of RES series ink provides printers with a single ink system for multiple uses. RES offers superior opacity with a satin finish while maintaining rapid cure rates. RES provides a durable, non – blocking surface and demonstrates excellent outdoor durability.

PERFORMANCE PROPERTIES

- ➔ 100% compatible with UVG series
- ➔ Excellent adhesion to a wide variety of substrates
- ➔ Superb water and abrasion resistance
- ➔ N-VP and heavy-metal free
- ➔ Superior opacity provides better color trapping
- ➔ Non-blocking, high slip-finish for easy handling
- ➔ Flexible for multi-layer applications and die-cutting
- ➔ Suitable for exterior exposure up to 3 years on premium vinyl

RECOMMENDED SUBSTRATES

- ➔ Pressure Sensitive Vinyls
- ➔ Polystyrene
- ➔ PETG
- ➔ Expanded Foam PVC
- ➔ * High density and fluted polyethylene with use of 3-5% 1534 Adhesion Promoter.
- ➔ Rigid Vinyl
- ➔ ABS
- ➔ Foam Board
- ➔ Acrylic
- ➔ Coated and Uncoated Paper
- ➔ Polycarbonate (not for use with adhesives)
- ➔ Polyethylene Coated Card Stock
- ➔ Top-Coated and Print-Treated Polyesters

* A minimum of 40 Dynes of surface energy is recommended for all Polyethylene and Polyolefin stocks.

CURING SPECIFICATIONS

RENEGADE RES will cure well when printed through a 355 plain weave polyester mesh or finer. RES's optimal cure window of 125 – 150 mJ / 550 – 650 mW is generally achieved with one 200 watt per inch mercury vapor lamp at belt speeds between 70 - 90 feet per minute. Cure speeds may vary as thicker material and dark surface colors require more energy. Adhesion should be a minimum of 95% from curing unit with final adhesion developing within six 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 adhesion due to insufficient cure is noticed, the use of RES Mixing Clear will increase light penetration and improve cure. 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

RENEGADE RES will yield an average of 3200 to 3600 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

RES Mixing Clear may be added to reduce opacity thus increasing cure speed. RES Mixing Clear is not recommended for viscosity reduction. UV-1800 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, Renegade ink series 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.

METALLICS

RES Metallic Mixing Clear is supplied for use in mixing metallic powders or pastes. The increase in viscosity of Metallic Mixing Clear helps insure a good particle suspension and maintain a good premixed 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, 260-305 meshes are recommended. With the use of RES Overprint Clear, extended weatherability and improved non-tarnishing properties can be achieved.

COLOR AVAILABILITY

RENEGADE RES 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

RES-0101	Primrose Yellow	RES-0205	Reflex Blue
RES-0111	Lemon Yellow	RES-0225	Forest Green
RES-0123	Medium Yellow	RES-0226	Lime Green
RES-0131	Brilliant Orange	RES-0210	Ultra Blue
RES-0135	Vivid Orange	RES-0220	Emerald Green
RES-0141	Fire Red	RES-0235	Teal
RES-0151	Scarlet Red	RES-0240	Purple
RES-0155	Rubine Red	RES-0260	Brown
RES-0160	Rhodamine Red	RES-0301	Opaque Black
RES-0180	Warm Red	RES-0311	Opaque White
RES-0190	Process Blue	RES-1350	Overprint Clear
RES-0200	Peacock Blue	RES-1710	Metallic Mixing Clear
UV -1800	Thinner		

COLOR MATCHING SYSTEM COLORS

RES-0064	CMS GS Yellow
RES-0066	CMS RS Yellow
RES-0114	CMS Orange
RES-0121	CMS YS Red
RES-0164	CMS BS Red
RES-0165	CMS Magenta
RES-0127	CMS Violet
RES-0230	CMS Blue
RES-0325	CMS Green
RES-0110	Shading Black
RES-0112	Tinting White
RES-1700	Mixing Clear

PROCESS COLORS

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

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

FLUORESCENT COLORS

RENEGADE RES 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.

RES-0900	Magenta	RES-0940	Chartreuse	RES-0970	Pink
RES-0910	Orange/Red	RES-0950	Red	RES-0980	Orange
RES-0920	Green	RES-0960	Orange/Yellow	RES-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.