



**Imagemark XR** is a high performance Ultra Violet curable screen printing ink specifically formulated for multiple substrate adhesion performance. XR is the broadest ink system of its type offering the versatility to adhere to nearly all point of purchase stocks, including HDPE and fluted polyolefin stocks without the addition of a catalyst. XR exhibits a durable, high slip surface with excellent outdoor durability.

click here for full product info & specs

CODE NO.	DESCRIPTION	NET\$/3.78L
XR-0064	IMAGEMARK XR CMS YELLOW GS	377.00
XR-0066	IMAGEMARK XR CMS YELLOW RS	387.50
XR-0101	IMAGEMARK XR PRIMROSE YELLOW	345.60
XR-0110	IMAGEMARK XR SHADING BLACK	262.35
XR-0111	IMAGEMARK XR LEMON YELLOW	284.20
XR-0112	IMAGEMARK XR TINTING WHITE	316.25
XR-0114	IMAGEMAKR XR CMS ORANGE	398.00
XR-0121	IMAGEMARK XR CMS RED YS	366.55
XR-0123	IMAGEMARK XR MEDIUM YELLOW	318.40
XR-0127	IMAGEMARK XR CMS VIOLET	391.70
XR-0131	IMAGEMARK XR BRILLIANT ORANGE	345.60
XR-0135	IMAGEMARK XR VIVID ORANGE	366.55
XR-0141	IMAGEMARK XR FIRE RED	360.80
XR-0151	IMAGEMARK XR SCARLET RED	408.45
XR-0155	IMAGEMARK XR RUBINE RED	374.95
XR-0160	IMAGEMARK XR RHODAMINE RED	390.65
XR-0164	IMAGEMARK XR CMS RED BS	372.85
XR-0165	IMAGEMARK XR CMS MAGENTA	377.00
XR-0180	IMAGEMARK XR WARM RED	399.00
XR-0190	IMAGEMARK XR PROCESS BLUE	316.25
XR-0200	IMAGEMARK XR PEACOCK BLUE	282.25
XR-0205	IMAGEMARK XR REFLEX BLUE	369.20
XR-0210	IMAGEMARK XR ULTRA BLUE	356.10
XR-0220	IMAGEMARK XR EMERALD GREEN	356.10
XR-0225	IMAGEMARK XR FOREST GREEN	366.55
XR-0226	IMAGEMARK XR LIME GREEN	370.75
XR-0230	IMAGEMARK XR CMS BLUE	303.75
XR-0235	IMAGEMARK XR TEAL	360.30
XR-0240	IMAGEMARK XR PURPLE	408.45
XR-0260	IMAGEMARK XR BROWN	345.60
XR-0301	IMAGEMARK XR OPAQUE BLACK	268.10
XR-0311	IMAGEMARK XR OPAQUE WHITE	270.20
XR-0312	IMAGEMARK XR DENSE BLACK	270.55
XR-0325	IMAGEMARK XR CMS GREEN	307.90
XR-1130	IMAGEMARK XR HT BLACK	266.00
XR-1175	IMAGEMARK XR WORK OFF BLACK	288.00
XR-1330	IMAGEMARK XR HT YELLOW	356.10
XR-1350	IMAGEMARK XR OVERPRINT CLEAR	247.15
XR-1530	IMAGEMARK XR HT CYAN	272.30
XR-1630	IMAGEMARK XR HT MAGENTA	351.90
XR-1700	IMAGEMARK XR MIXING CLEAR	227.25
XR-1710	IMAGEMARK XR METALLIC MIXING CLEAR	226.75
XR-1730	IMAGEMARK XR HT BASE	282.75



# **IMAGEMARK XR** PRODUCT DATA SHEET

Imagemark XR is a high performance Ultra Violet curable screen printing ink specifically formulated for multiple substrate adhesion performance. XR is the broadest ink system of its type offering the versatility to adhere to nearly all point of purchase stocks, including HDPE and fluted polyolefin stocks without the addition of a catalyst. XR exhibits a durable, high slip surface with excellent outdoor durability.

# PERFORMANCE PROPERTIES

- NVP and heavy metal free
- ▶ No additives required for adhesion to Coroplast®
- ▶ Flexible for multi-layer applications and die-cutting ▶ Rapid cure rates, ideal for multi-color presses
- **➡** Good water resistance without additives
- ▶ Excellent water and moisture resistance with the addition of XR-1550 Water Resistant Additive

# **RECOMMENDED SUBSTRATES**

- Pressure sensitive vinyls
- Polycarbonate
- Polystyrene
- → \* Fluted Polyolefins (Coroplast®)
- ABS
- Acrylic Rigid Vinyl
- Board Stock
- Expanded Foam PVC

■ Outstanding adhesion to a wide variety of substrates

▶ Low tack finish for easy handling of double sided prints

- → Coated and Uncoated Paper
- → Anodized Aluminum
- Many Coated Metals
- \* A minimum of 40 Dynes of surface energy is recommended for all Polyethylene and Polyolefin stocks.

# **CURING SPECIFICATIONS**

Imagemark XR will cure well when printed through 355 plain weave polyester mesh or finer. XR's optimal cure window of 125 - 175 mJ / 550 - 650 mW is generally achieved with one 200 watt per inch mercury vapor lamp at belt speeds between 65 - 75 feet per minute. Stock selection may necessitate additional 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 gloss or adhesion due to insufficient cure is noticed, the addition of 5 - 10 % XR 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**

Imagemark XR 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*

The addition of 2% XR-1550 Water Resistant Additive is recommended where improved water and moisture resistance is required. XR Mixing Clear may be added to reduce opacity thus increasing cure speed. XR 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, XR 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.

### **METALLICS**

XR 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 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 XR Overprint Clear, extended weatherability and improved non-tarnishing properties can be achieved.

# **COLOR AVAILABILITY**

**Imagemark XR** 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**

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

#### **PROCESS COLORS**

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

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

## FLUORESCENT COLORS

**Imagemark XR** 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.

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