



# inktech UV INKS

## IMAGEMARK XR (XR) MULTI-PURPOSE

### MULTI-PURPOSE UV INK

**Imagemark XR** is a UV curable screen printing ink specifically formulated for substrate adhesion performance. The adhesion properties of **Imagemark XR** eliminate the need to purchase more costly ink and/or catalyst for substrates which former multi-purpose inks were not ideally suited. **Imagemark XR** is the broadest ink system of its type offering flexibility for pressure sensitive vinyl applications with the unique versatility to adhere to nearly all the point of purchase stocks including HDPE and fluted polyolefin stocks (Coroplast<sup>®</sup>) without addition of catalyst.

**Imagemark XR** offers superior opacity and high gloss while maintaining rapid cure rates ideal for multi-colour presses. **Imagemark XR** provides a durable, non-blocking surface and demonstrates excellent outdoor durability. Halftones in this ink series are manufactured in our high definition printing "New Rheology" viscosity. **FULL TECHNICAL SHEET AVAILABLE.**



**CAUTION**  
**It is the Printer's Responsibility to Test Ink Before Printing**

1. Allow 24-96 hours after test printing to evaluate ink for intended application.
2. If product requires overlapping coats (i.e. multi-colours) test ink on substrate with overlapping coats.
3. Refer to M.S.D.S. for heavy metal content.

### IMAGEMARK XR STANDARD COLOURS

Special Match Colors also available

CODE #	DESCRIPTION	3.78L
XR-0101	Primrose Yellow	198.00
XR-0111	Lemon Yellow	176.58
XR-0123	Medium Yellow	182.40
XR-0131	Brilliant Orange	198.00
XR-0135	Vivid Orange	210.00
XR-0141	Fire Red	206.70
XR-0151	Scarlet Red	234.00
XR-0155	Rubine Red	214.80
XR-0160	Rhodamine Red	223.80
XR-0180	Warm Red	228.60
XR-0190	Process Blue	181.20
XR-0200	Peacock Blue	161.70
XR-0205	Reflex Blue	211.50
XR-0210	Ultra Blue	204.00

CODE #	DESCRIPTION	3.78L
XR-0220	Emerald Green	204.00
XR-0225	Forest Green	210.00
XR-0226	Lime Green	212.40
XR-0235	Teal	206.40
XR-0240	Purple	234.00
XR-0260	Brown	198.00
XR-0301	Opaque Black	153.60
XR-0311	Opaque White	154.80
XR-0112	Tinting White	181.20
XR-0110	Shading Black	150.30
XR-1700	Mixing Clear	130.20
XR-1710	Metallic Mixing Clear	129.90
XR-1350	Overprint Clear	141.60
XR-1330	HT Yellow	255.00

CODE #	DESCRIPTION	3.78L
XR-1630	HT Magenta	252.00
XR-1530	HT Cyan	195.00
XR-1130	HT Black	190.50
XR-1730	HT Base	162.00
XR-0064	CMS Yellow GS	216.00
XR-0066	CMS Yellow RS	222.00
XR-0114	CMS Orange	228.00
XR-0121	CMS Red YS	210.00
XR-0127	CMS Violet	224.40
XR-0164	CMS Red BS	213.60
XR-0165	CMS Magenta	216.00
XR-0230	CMS Blue	174.00
XR-0325	CMS Green	176.40
XR-1800	Thinner	85.00

 **Please Note: All screen inks can be ordered by phone or email. No shopping Cart on these items.**

See Product Application and Specs below

---

---

## **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
- ➔ Good water resistance without additives
- ➔ Excellent water and moisture resistance with the addition of XR-1550 Water Resistant Additive
- ➔ Outstanding adhesion to a wide variety of substrates
- ➔ Low tack finish for easy handling of double sided prints
- ➔ Rapid cure rates, ideal for multi-color presses

### **RECOMMENDED SUBSTRATES**

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

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

**COLOR MATCHING SYSTEM COLORS**

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

**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.