

# TRIANGLE®

# GRR

## UV & LED curable pigmented inks

### Technical Data Sheet

For more information or for the Triangle sales person in your area, please contact:

INX Digital International Co.  
2125 Williams Street  
San Leandro, CA 94577  
tel +1 510.895.8001  
fax +1 510.895.8080  
info@INXdigital.com

Website:  
[www.triangleINX.com](http://www.triangleINX.com)



## GRR

**INX Digital International Co.'s GSP ink is a premium UV and LED curable high density pigmented inkjet ink set formulated for use in the VUTEK® GS™ Series printers, especially the "r" models running only roll-to-roll.**

Triangle's **GRR** inks are optimized for fast curing, both UV and LED, on the VUTEK GS series printers. They are Chemically compatible with the various OEM ink sets and produce a comparable Color Gamut to the OEM inks sets. **GRR** is formulated to have excellent adhesion and flexibility on a wide array of digital roll graphic media.

These inks are intended for jetting with high consistency on the VUTEK GS Series of printers

- ▼ Fast Curing
- ▼ Compatible color gamut to GS Series inks, better than GSLXr Series inks
- ▼ Lower cost
- ▼ High chemical resistance
- ▼ Eco-friendly bag-in-box packaging minimizes waste
- ▼ Chemically compatible for easy conversion
- ▼ UV & water resistant without coating or lamination
- ▼ Backed by INX Digital's Worldwide Outdoor Durability and Ink Train Warranty for TRIANGLE® brand ink

### Packaging

- ▼ 2 x 5 liter bag in box. Net quantity 10 liters.
- ▼ 9 Colors



### Recommended Flush

**UV Ink Train Conditioner** – Monomer-based flushing fluid also used for head wiping.

**Warning: GRR has limited compatibility with solvents. Adding solvents for any extended period of time into the ink train may cause premature curing.**

### Outdoor Durability

**GRR** inks are designed for outdoor use and, with a suitable substrate and correct ink application, should withstand 1-2 year exposure. Laboratory tests passed the 2-year outdoor durability criteria (delta E of <10 using accelerated testing equipment).

### Temperature Exposure & Jetting

NO Temperature adjustments required during conversion. Inks can be used in jetting equipment with temperatures up to 60°C. Prolonged exposure to temperatures above 55°C however, should be avoided as long term exposure to high temperatures can induce premature polymerization.

**INX...**  
DIGITAL

# TRIANGLE®

# GRR

## UV & LED curable pigmented inks

### Flexibility & Adhesion

GRR inks are formulated to achieve optimum adhesion on commonly used flexible display graphics media. Certain display graphics media types such as polyethylene and other non-ionic surfaces can be problematic, so the customer should test these materials prior to conversion.

### Incompatible Solutions

GRR is NOT compatible when exposed to solvents for prolonged periods of time. Certain solvents may cause premature curing of the inks within the ink train and print head. If there is solvent installed prior to the ink conversion, this solvent will be removed and no solvent will be installed as part of the ink train when converting to GRR inks.

### Ink Storage and Shelf Life

These inks should be stored between 5° - 40°C (41° - 104°F). When stored properly inks have a 12 month shelf life.

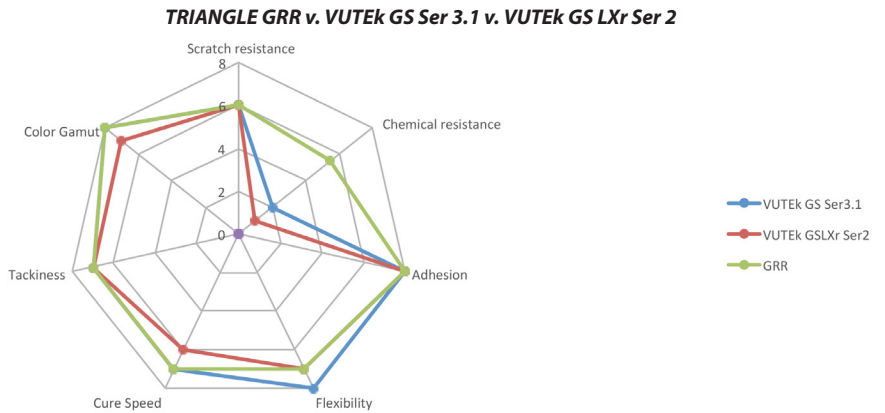
**\*White ink will need agitation before placing into printer and during the use in ink train.**

### Typical Physical Properties

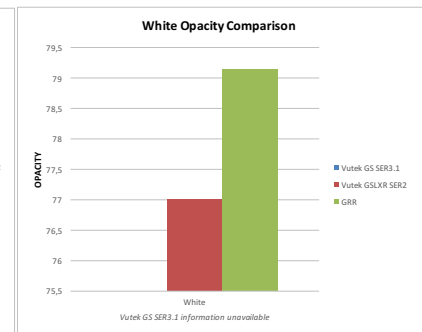
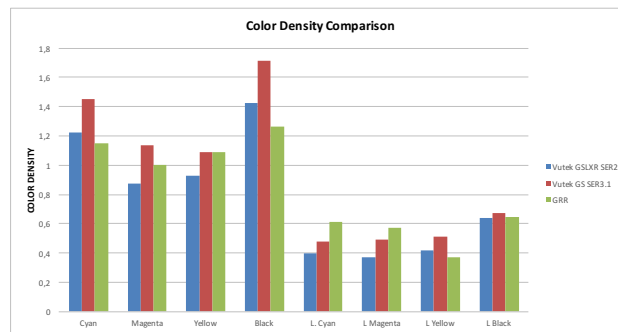
PROPERTIES	RANGE
Viscosity (45°C)	10.5 - 11 mPa-s
Surface Tension (25° C)	23 - 25 mN/m
Cure Dosage (Metal Halide Bulb)	110 mJ/cm <sup>2</sup>

### Property Gamut

The spider chart below compares the properties of the TRIANGLE® GRR ink series against those of the VUTEK® GS™ Ser 3.1 and VUTEK® GS™ LXr Ser 2 series inks for the VUTEK® GS™ series printers.



### Color Density Comparison



\*Conditions apply. This information has been carefully studied from experience gained in the laboratory and under commercial situations. It is subject to change without notice. All sales are subject to our standard terms and conditions of sale. Since applications vary tremendously, the user assumes the obligation to test this product in their specific situation to determine its suitability and assumes all risk and liability related to such use. INX International Ink Co. makes no warranty, express or implied, for the use of the product for any particular application. In no event shall INX International Ink Co. be liable for damages in excess of the original cost of the product nor shall INX International Ink Co. be liable for any special or consequential damages. \*\*Coverage was calculated using actual figures obtained from a print shop. Coverage depends on the file being printed and printer settings. GRR is not endorsed by VUTEK®. VUTEK® GS™ names and copyrighted materials are the property of Electronics For Imaging, Inc., Foster City, CA.

