

# **Technical Information**

### **UV Inks**

# **UV VECTA Carton Series**

"BESTCURE VECTA CARTON" is a low odor UV curing ink for offset printing. It is suitable for paperboard, PE coated paper, aluminum-laminated paper and so on. It offers the best curing property and printability.

#### **Features**

- ▶ Better emulsification resistance than "UV L CARTON" series.
- Excellent curing.
- ▶ Excellent fluidity. Less backing-away.
- Improved handling.
- Excels in resistance to rub, solvent and various other factors.
- ▶ Enables excellent printing effects like gloss and high consistency.
- Low odor and acridity.

## **Properties**

	L TYPE		M TYPE		
	T.V	DM	T.V	DM	
Yellow	4.5	40.0	5.5	39	
Magenta	5.0	40.0	6.0	38	
Cyan	5.0	39.0	6.0	38	
Black	5.5	41.0	7.0	40	

<sup>\*</sup> T.V: Ink-O-Meter (Water temperature: 38 , 400rpm, 1 minute value)

## Resistances

Draduat Nama	Lightfastness		Heat	Soap	Solvent
Product Name	Dark Color	Light Color	Resistance	Resistance	Resistance
UV VECT Carton Yellow	5	3	4	5	5
UV VECT Carton Magenta	4 ~ 5*	3*	4	2	4
UV VECT Carton Cyan	8	7	5	5	5
UV VECT Carton Black	7~8	7	5	5	5

Evaluation: Lightfastness 8(excellent) 1(poor); Other Resistances: 5(excellent) 1(poor)

- ▶ The data contained herein are based on the results of the tests conducted in accordance with the in-house test methods, and are not standard values. Always conduct pre-use tests to ascertain the suitability of the product to your requirements. Nothing contained herein is to be construed as a recommendation for use in violation of any patents, applicable laws or regulations. It is the responsibility of the user to comply in all respects with applicable laws and regulations.
- Owing to product improvement the information contained herein may be modified without any prior notice.
- Make sure to read MSDS thoroughly before using the product.

<sup>\*</sup> DM: Spread-O-Meter (Room temperature: 25 , spread diameter after 1 minute (mm))

<sup>\*</sup>Lightfastness deteriorates significantly when wet with water.

<Test Procedures>

**Lightfastness...**Conducted FADE-O-METER exposure test on print samples. Classified resistance on a scale of 1 to 8 on the basis of exposure time and degree of fade. Dark colors were tested without dilution, and light colors by diluting them 5 times in a medium.

**Heat Resistance...**Exposed print samples to 150 heat in a drying oven for 10 minutes. Classified resistance on a scale of 1 to 5 on the basis of fade.

**Soap Resistance...**Applied 10% soap gel at 20~25 to print samples for 1 hour. Classified resistance on a scale of 1 to 5 on the basis of degree of fade and bleed in the soap gel.

**Solvent Resistance** ...Immersed print samples for 24 hours in a mixture of toluene and acetone in 1:1 ratio at 20-25 . Classified resistance on a scale of 1 to 5 on the bases of degree of fade and bleed in the mixture.

# **Handling Instructions**

- Only additives and cleaning agents meant for UV inks should be used.
- ▶ For plates, use nega-type PS plates or posi-type PS plates for UV inks.
- Ink adhesion varies depending on the substrate used and the surface state. Conduct pre-use tests to check the adhesion.
- ▶ Black ink uses low resistant alkali blue toner pigments as toning agent. Therefore, conduct pre-use tests to ascertain the suitability of the product for post-printing process, such as PP lamination, and printing products that are retort processed.
- ▶ Note that excessive application of ink will cause defects in curing and adhesion.
- ▶ The ink is developed to not cause any adverse effects on human body. However, in case of some people, leaving the ink on body or clothes for long time may cause rash. Wear protective gear when handling the ink, and wash your hands after completing the job.
- Leaving a non-absorbent stock print outdoor, or exposing it to water (including dew) causes adhesiveness to deteriorate to the extent that the printed object will peel-off even by a nail scratch.



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