

# **Technical Information**

# UV Inks UV VP Series

Not only does it excel in adhesive property but also in drying property and solvent resistance. This ink, Often used for non-absorbent substrates like PET, treated aluminum-laminated paper, PVC films, synthetic paper, PE and PP films, as well as paper, is suitable for both films and paper. Further, it is widely used in printing of labels (stickers) used for electric appliances, office equipments and auto parts where strong film is required.

## ■ Standard Colors and Resistances

	Lightfastness		Heat	Soap	Solvent
Product Name	Dark Color	Light Color	Resistance	Resistance	Resistance
UV VP Yellow	5	3	4	5	3
UV VP Magenta☆	4~5*	3*	4	2	3
UV VP Cyan	8	7	5	5	3
UV VP Black	7~8	7	5	5	3
UV VP Transparent White	8	-	5	5	3
UV VP Concentrated	8	7	5	5	3
Opaque White					
UV VP Warm Red	4~5	3	4	3	3
UV VP Violet	7~8	7	5	5	3
UV VP Green	8	7~8	5	5	3
UV VP Super Lightfast	6~7	5~6	5	5	3
Yellow					
UV VP Super Lightfast	6~7	5~6	5	5	3
Magenta					
UV VP Super Lightfast	6~7	5~6	5	5	3
Warm Red					

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

<sup>☆</sup>Migration may occur when exposed to water (including dew).

<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°C 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°C 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°C. Classified resistance on a scale of 1 to 5 on the bases of degree of fade and bleed in the mixture.

## Handling Instructions

- If viscosity needs adjustments, either use "UV DG Reducer" (within 5%) or "No.2 UV Contex" (within 15%). (However, this may deteriorate adhesion, therefore make sure to conduct necessary tests when using additives.)
- For ink rubber roller, use of urethane rubber resin roller is recommended. (Recommended product: GRANPAUL UV by MIYAGAWA Roller)
- In general post printing processes, such as foil stamping, laminating, etc., are possible. (However, conduct pre-use tests to ascertain suitability when post printing processes are planned.)
- In case of some stocks the ink may not adhere, therefore, make sure to check prior to use.
- Use with OP varnish, if rub resistance is required. (Recommend product: "UV Video OP Varnish Y " offered by us.)
- 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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- 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.