

English Version (Japanese Translation)

screen ink

UV-curable ink 'Raycure'

Common color

general printing | UV-curable type

Raycure VX 4700 Series

This UV ink offers excellent flexibility and outstanding weather resistance.
Ideal for printing on vinyl stickers and similar items that require long-term weather resistance.

Product Features

- It has outstanding weather resistance.
- It forms a highly flexible film with high physical properties.
- It excels in compatibility with overprinting and post-processing.
- With a strong gloss finish, it offers excellent workability such as printing reproducibility.
- It has low skin irritation (P.I.I) and is very safe.

Features

post-processing

Safety

print reproducibility

printability

flexibility

high physical properties

flexibility

Low skin irritation

Endurance

solvent resistance

oil resistance

Physical Endurance

weather resistance

Recommended Printed Materials

Material

Vinyl

Rigid Vinyl [PVC]

Vinyl sticker

Weather-resistant PVC stickers

Premium PVC Stickers

polyester-based

Treated Polyethylene Terephthalate [PET]

Treated PET Film

Treated PET Stickers

Finish, Texture, and Visual Effects

finish

gross

Color & Grade

Standard Colors (Standard Colors)

 00 Medium	 01 White	 08 Red	 16 Pink	 25 Purple	 28 Orange	 45 Dark Blue	 46 Blue
 75 Green	 85 Ultramarine	 90 Black					

Standard Colors (Weather-Resistant Colors)

 06 Cinnabar	 13 Qing Huang	 14 Red and Yellow	 18 Red
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Half-tone color (standard model)

 Medium	 Yellow (yellow/blue-yellow)	 cyanide	 Black (Black)	 Magenta (Red)
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Halftone Color (Matte Type Halftone - N)

 cyanide	 Black (Black)	 Magenta (Red)	 Medium	 Yellow (yellow/blue-yellow)
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Surface Decoration Clear

Matte Clear

For pseudo-etching and non-glare printing.
Strong thixotropic properties, excellent reproducibility of the gauze eyes.

HFT Matte Clear

For flat matte finishes.
The matte finish is close to that of solvent-based inks.

UB-1 Matte Clear

Fine, grainy semi-gloss finish. (High density)

UB-2 Matte Clear

Fine, grainy semi-gloss finish. (Low density)

Clear Transparent Matte

Matte clear with excellent transparency.
For pseudo-etching and non-glare printing.
High viscosity.

[Features] MK Matte Clear

High-viscosity HFT mat clear product

[Features] YK-5 (Modified) Matte Clear

Mat clear using uneven surfaces.
Improved workability.

Overcoat Clear

Improves physical properties such as gloss impartation and weather resistance.

[Features] DMC Overcoat Clear

Improved Texture, Adhesion, and Curing Performance on EXG Ink

[Features] Clear Custom 5 Overcoat

Contains UV absorbers for even better weather resistance.

SWOM2000h qualified.

Medium

Base for adjusting ink color density and mixing special colorants such as gold and silver powders.

Can also be used for overcoats and undercoats.

For gloss-type inks.

transparent medium

Medium with excellent transparency.

Non-silicone type.

Thick Medium

For raising printing.

RL Thick Medium

For thick film printing.

Softness and high viscosity

RL-N Thick Medium

For thick film printing, non-silicone type.

Transparency, softness, and high viscosity.

DP-1 Medium

The random surface and the textured texture of the printed grain are pronounced.

Good scratch resistance.

UF-1 Medium

A fine particle type of the DP-1.

The grain is slightly smaller, but the finish is similar to the DP-1.

[Features] KB Medium

RL Medium with improved leveling properties.

Cloudy cloudiness.

[Features] RL(TM) Medium

KB Medium product with improved defoaming and blocking resistance.

It has a strong milky white.

[Features] RL(TM) Transparent Medium

RL(TM) medium with improved transparency.
Made with modified silicone.

Specifications

Print area

70~90m²/kg (excluding thick medium and similar materials)

How to use

- Stir well before use and print as is.
- When diluting, add 4700 reinfuser within 10% of the amount.

print edition

Printing Methods & Formats

overprinting

Types of Editions	mesh	Cleaning
Screen version	300~350	Vinyl cleaning solvent

Curing Method & Conditions

UV Exposure Conditions

It varies depending on the ink color and type of substrate.

Types of lamps	lamp strength	irradiation distance	Conveyor speed	total luminous amount
Metal Halide Lamp	120W/cm, 1 lamp	10cm	8~10m/min	Approximately 250~350mJ/cm ²

Test data (environment, physical properties, weather resistance, performance, etc.)

Conditions	
printed matter	PVC Sticker
print edition	300 Polyester Mesh
Sol thickness	10 μ m
Printing Film Thickness	10 μ m
hardening conditions	Lamp type: Metal halide lamp Lamp strength: 120W/cm, 1 lamp Conveyor speed: 8m/min Total light output: 300 mJ/cm ²

Results

Test Items	Test Method	Results
Adhesion	Cross-Cut Cellotape Release Test	100/100 Passing
hardness	JIS K-5400 8.4 Pencil Hardness	F~H
flexivity	JIS K-5400 8.1 Bending Test	excellent
overprinting property	Adhesion with 5-color overlapping printing	qualified
alcohol resistance	99.5% Ethanol Load 500g 100 rubbing cycles	Slight gloss reduction
Water Temperature Resistance	Soak in 40° C warm water for 24 hours	No abnormalities
weather resistance	Sunshine Weather Meter 2000 hours (Combined with 4700 Overcoat Clear)	No abnormalities

Weather Resistance List

Grade	color name
6	4785 Ultramarine
7	4708 Red
7-8	4700 Medium 4701 White 4706 Golden Red 4716 Pink 4718 Red 4725 Purple 4728 Orange
8	4713 Qing Huang 4714 Chihuang 4738 Red 4745 Dark Blue 4746 Blue 4775 Green 4790 Black

- We only stock some colors (white, black, medium).
Please note that colors other than these are made-to-order products.
- When ink is diluted with medium or white ink for printing, its weather resistance drops significantly compared to the primary colors.

Notes

- For general precautions, please refer to the attached document "[UV ink](#)". Please refer to the detailed information in the "" section.
- For safety precautions when using the product, please refer to the product's Safety Data Sheet (SDS).
- The contents provided in this information may be changed or revised without prior notice.
- This characteristic data is based on the evaluation results conducted by our company and does not guarantee the product's characteristics during customer use.
- When using the device, please thoroughly consider the conditions based on the evaluation results of the equipment and substrate actually being used.