

1. Features and uses

The FujiFlex Crystal Archive Printing Material is a silver halide colour printing material with enhanced laser scanning exposure suitability, designed exclusively for digital output on large-format digital printers. This printing material yields high-image-quality digital prints when used with a laser printer. Furthermore, because of its PET base, this printing material produces prints that are superbly smooth with a sharp, transparent finish.

It is suitable for a wide variety of uses, such as large sized displays, advertisements, and photo exhibitions.

Features

High D-max	Boasts a wide tonal range, producing high-image quality prints with a rich textural quality
Purer Whiteness	Clearer, more distinct print images and sharper text quality
Vibrant Colour Reproduction	Expanded colour reproduction range with high colour saturation, ideally suited to commercial use
Excellent Latent Image Stability	Stable production of more uniform high-quality prints for greater productivity
Excellent Image Stability	Highest level of image stability ideal for display purposes
Remarkable Surface Smoothness and Flatness	Produces prints with a mirror-like super gloss and great clarity
PET Base	Thickness: 175µm

2. Safelight

- Handle in total darkness. If safelight use is unavoidable, observe the following precautions.
- Expose material no longer than 1 minute to light emitted through a Wratten Safelight Filter No.13 (or Fuji Safelight Filter No.103A) in a 10-watt tungsten lamp safelight located at least 1 meter from the work area.
 - Safelight filters fade with extended use and need regular checking. Replace when paper fogging is detected.
 - Since exposed material is subject to safelight- induced sensitivity increases in the exposed areas, be sure that handling precautions are observed.

**3. Pre-processing
paper handling -
Storage**

- The higher the temperature and humidity, the more material, whether unused, unexposed or exposed, is susceptible to adverse changes in speed, colour balance, physical characteristics and other properties. Unprocessed material is best stored at low temperatures. Specifically, the following conditions should be used for material storage.
- Short term storage: Store in a cool and dark location, away from direct sunlight, high temperature and high humidity.
 - Long term storage: Below 10°C (50°F).

3. Pre-processing
paper handling -
Storage

Raw material which has been stored at a low temperature (by refrigeration) should be set aside and allowed to warm to room temperature prior to being opened. If the material is taken out of its packaging immediately after being removed from refrigerated storage, condensation will form on the material surfaces, resulting in print color changes and easily damaged surfaces.

The shortest periods required to return freezer- or refrigerator-stored material to room temperature (minimum temperature equalization periods) are as follows:

20°C (68°F) Temperature Equalization Periods

Unit: hours

Paper Size	Storage Temperature		
	-20°C (-4°F)	0°C (32°F)	10°C (50°F)
127cm x 40m (50 in. x 131 ft.)	9.5	8	6

Notes: Do not heat paper in order to equalize temperatures.
Remove paper from refrigeration one day before use.

If exposed material remains unprocessed for extended periods of time under normal room conditions or is subjected to high temperature and/or high humidity, changes in the image and colour balance may occur.

The time between exposure and processing should be fixed for purposes of uniform quality. Rather than holding exposed material for pro-cessing the next day, initiate processing as soon as possible.

4. Calibration data
for printers

Please refer to the following calibration data as a general guide when using the FujiFlex Crystal Archive Printer Material on a large format digital printer.

When using the print material for the first time a section of the material should be flashed to light and processed normally. Starting D-max aims should be set approximately .15 to .20 below the flashed black density readings. Check fine black text for any colour flare as an indication of aims being too high or a possible processing problem.

1. Durst Reference data

Lambda 130/131

Dmax Aim	Basic Calibration
R = 2.55	Y = 79.86
G = 2.50	M = 21.25
B = 2.35	C = 0.00
	D = 139.82

Theta 50/51

Dmax Aim	Basic Calibration
R = 2.55	Y = 79.86
G = 2.50	M = 21.25
B = 2.35	C = 0.00
	D = 139.82

Epsilon 30 plus

Dmax Aim	Intermittency	Basic Calibration
R = 2.55	Y = 79.86	Y = 79.86
G = 2.50	M = 21.25	M = 21.25
B = 2.35	C = 0.00	C = 0.00
	D = 139.82	D = 139.82

2. ZBE Reference data

Dmax Aim
R = 2.55
G = 2.50
B = 2.35

3. Polielettronica Laserlab 50/76/127 Reference data.

Use the auto calibration tools as is in the machine.

4. Océ Lightjet Reference data

For the calibration targets for the Océ Lightjet 430, 500XL and 5000 printers, please contact FUJIFILM Corporation, 7-3 Akasaka 9-chome, Minato-ku, Tokyo107-0052, Japan.

5. Processing

This material is designed for use with RA-4 type, including Fuji Hunt CP-RA Process.

6. Post-processing
handling/storage

Prints are subjected to various influences (heat, humidity, light, air pollution, etc.) relative to the conditions under which they are stored.

The general conditions under which prints are stored are outlined below.

- **Recommended Storage Conditions:**
Temperature: Below 25°C (77°F)
Humidity: 30% to 50% RH with good ventilation
- **Extended Storage Conditions:**
Temperature: Below 10°C (50°F)
Humidity: 30% to 50% RH

7. Light sources for
viewing

When inspecting finished colour prints, it is essential that an illumination source be used that has superior spectral characteristics, adequately high colour temperature and sufficient brightness. This is because results can appear different, depending on light quality. For precise results, prints should be examined under the conditions designated by ISO 3664-2000. As a general guide, the following conditions are recommended.

Color Temperature : 5000 ± 300 K
Average Illumination : 500 Lux or more
General Color Rendering Index : Ra 90 or more*

* To attain these values, special fluorescent lamps designed for colour evaluation (e.g. EDL type) should be used.

When inspecting finished prints, be careful to shut out all external light and coloured reflected light.

8. Paper surface
available

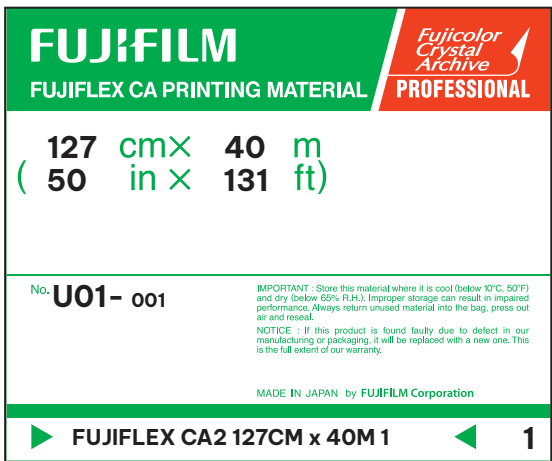
Super Glossy

9. Control strips

Processing control can be provided through the use of Fujicolor Crystal Archive Paper Control Strips Process CP-40FA/43FA/47L/48S and 49E

10. Markings (Box /
Emulsion numbers)

10.1 Box labelling



11-2 Emulsion Numbers

Emulsion numbers will range between U01 - U99.

11. Technologies incorporated

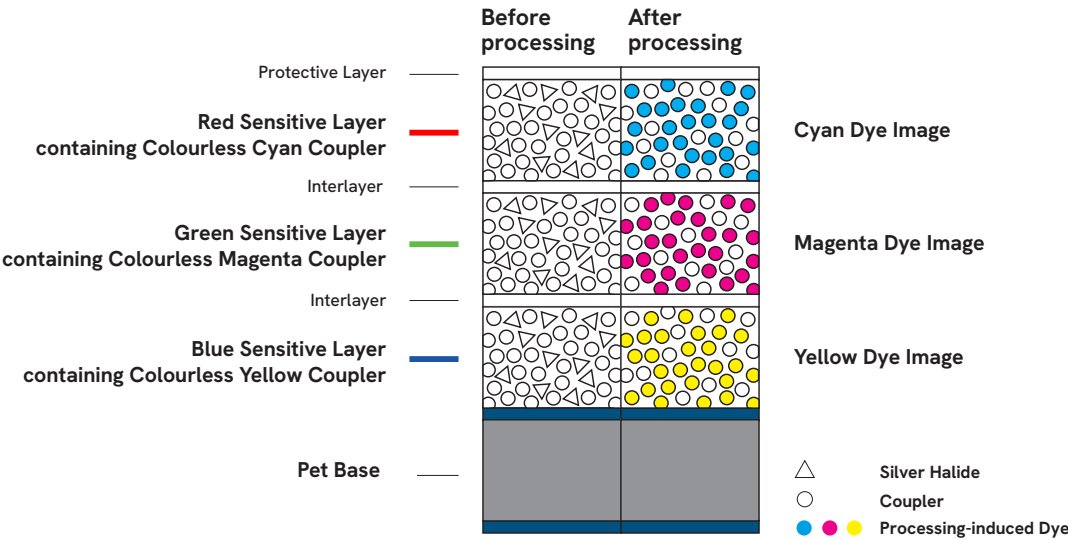
12-1 X-Coupler Technology

Through the incorporation of a new cyan coupler (XCoupler Technology), which features a new molecular structure developed by Fujifilm’s proprietary technologies, this material is capable of reproducing the subtle shades of green and of forming colors of high purity, such as vibrant blues and reds.

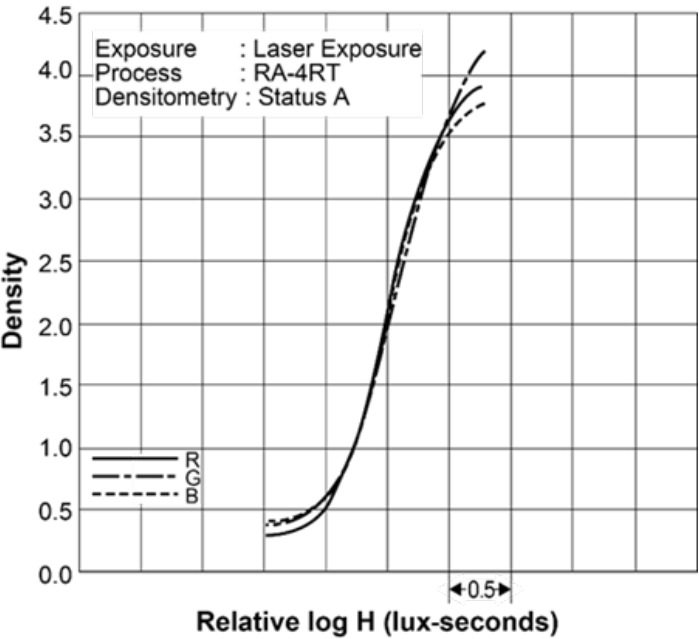
12-2 NLS (New Low Stain Spectral-Sensitizer) Technology and ARR (Advanced Resistance-to-Radiation) Technology

In addition to WE (White Enhancing) Technology used in the former FujiFlex Crystal Archive Printing Material, this printing material has incorporated NLS Technology, which is Fujifilm’s LSS Technology taken to a higher level. The results are more brilliant, purer whites and clearer and more distinct highlights. In addition, ARR Technology, an advance over the previous RR Technology, has been incorporated to suppress fogging caused by ambient radiation, enhancing the maintenance of white purity in unexposed material.

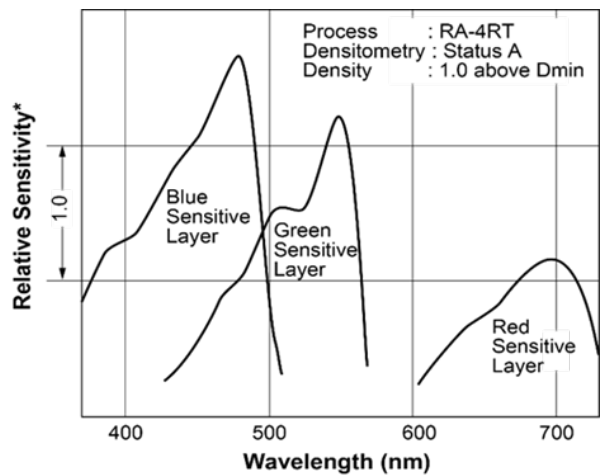
12. Material structure



13. Characteristic curves

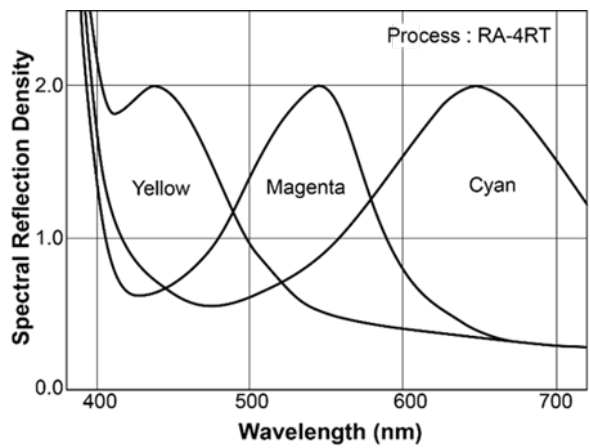


14. Spectral
sensitivity curves



* Sensitivity equals the reciprocal of the exposure (J/cm²) required to produce a specified density.

15. Spectral dye
density curves



16. Sizes available

For available sizes, please ask yor local distributor