Encres DUBUIT
INNOVATIVE INKS

EvoJet 1900 UV

Provisional Technical Data Sheet

EVOJET 1900 ink series is a reliable solution for use with Kyocera KJ4A print heads

FEATURES

- EvoJet 1900 is a UV-curable ink jet suitable for the decoration market but also for all industrial printings such as packaging, direct printing on plastics and on a large variety of substrates such as PVC, Vinyl, banner, mesh, paper, canvas, styrene (no edge clipping), polypropylene, polycarbonate, Dibond®, Priplak®, Akylux®...
- EvoJet 1900 offers an expanded substrate compatibility trough an improved and superior
- adhesion.
- Very high cure speed
- Excellent image quality on a broad range of substrates
- Pre-treatment on difficult substrates will strengthen the adhesion
- High color gamut
- Pigment particle size is sub-micron defined for extra fine resolution and controlled dot gain avoiding a maximum of satellite over spray.

INK PROPERTIES

Surface tension at a temperature of 25 °C (Krüss K11 tensiometer)

Cyan 42275	24mN/m
Magenta 42274	24mN/m
Yellow 42272	24mN/m
Light Cyan 43813	
Light Magenta 43814	
Black 42273	24mN/m
White 42276	23,5mN/m

Density at 25 °C (Krüss K11 tensiometer)

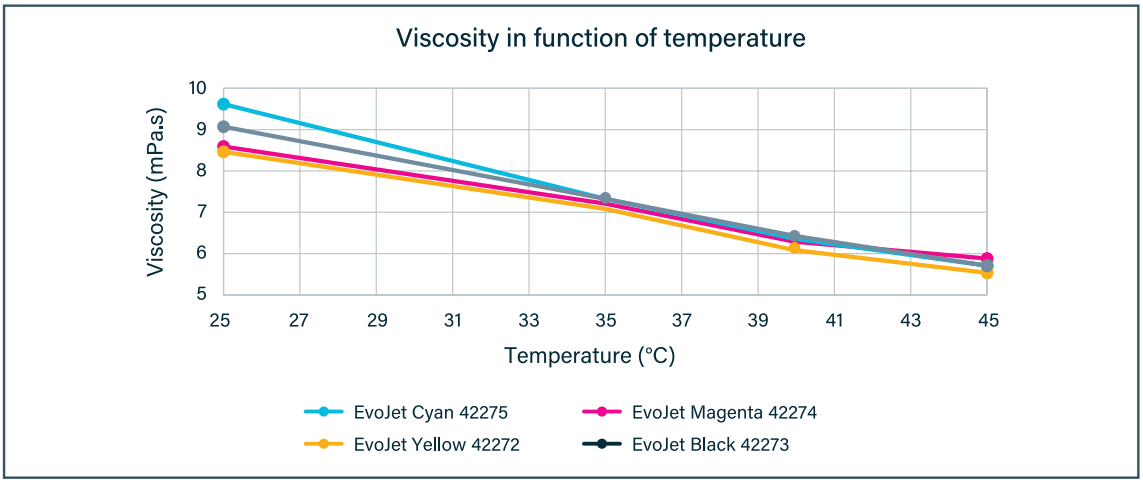
Cyan 42275	1.02
Magenta 42274	1.01
Yellow 42272	1.02
Light Cyan 43813	
Light Magenta 43814	
Black 42273	1.02
White 42276	1.14

VISCOSITY

Measures done at 45 °C/shear rate between 100 and 1000s-1
Rheometer Anton Paar MCR 102

Cyan, Magenta, Yellow, Light Cyan, Light Magenta and Black	5 – 6 mPa.s
White	6 – 7 mPa.s

COLORS



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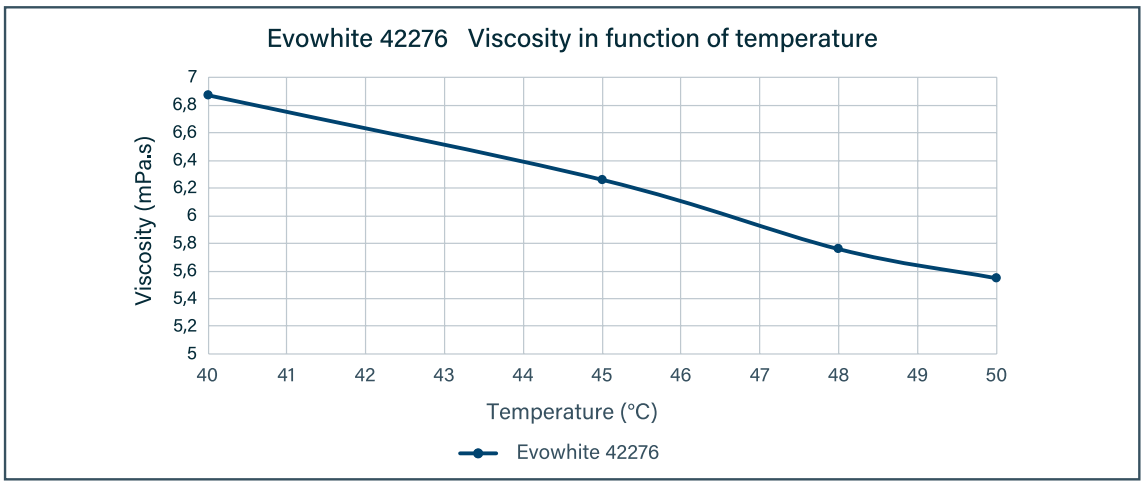
WHITE



PARTICLES SIZES

For all colors, Di50<400nm and Di90<1000nm (Cordouan Vasco DL 135 particle sizes analyser)

CURING

Mercury lamps with a speed belt of 20m/min (measured with a Power Puck II)

UVA (320-390nm)	110mJ/cm²	380mW/cm²
UVB (280-320nm)	100mJ/cm²	350mW/cm²
UVC (250-260nm)	30mJ/cm²	110mW/cm²
UVV (395-445nm)	90mJ/cm²	310mW/cm²

Under laboratory conditions, curing is good at a speed of 40m/min

UV LED (Phoseon lamp FireJet 200 385nm 16W/cm²)
ALL OUR COLORS CURE AT 8W/CM²

PRINTING PARAMETERS

- Temperature: 18 to 25 °C.
- Optimum humidity: 40 to 60% (without condensation).
- Operating humidity: 30 to 70% (without condensation).

Jetting temperature: About 40 °C for all the colors CMYK + W

The temperature of the sub tank and the print heads needs to be ideally the same.

MACHINE STOPPAGE

To avoid print head degradation, the inks should be flushed from the print heads before putting the printer at rest for longer time periods.

PACKAGING

All inks are available in 1L bottles
Flushing solvent in 1L bottles

STORAGE

For optimum performances and durability EvoJet 1900 series must be stored under 30 °C.
Shelf life from date of manufacture is:

- All colors: 12 months
- White: 9 months
- Evoclean: 36 months

Always stir the ink well before use, especially the whites (risk of sedimentation during long-term storage).

INK CHANGE OVER

For optimal performances, it is recommended to thoroughly clean the ink system and jet assemblies with the appropriate flushing solvent dedicated to the ink left in the system, and then flush again with EvoClean flushing solvent to avoid contamination of the system and of the ink. It is highly recommended to replace all filters.

ENVIRONMENTAL, HEALTH & SAFETY

EVOJET 1900 ink series is formulated free of any volatile solvents
The vast majority of printing inks and related products formulated by Encres DUBUIT contain no substances of very high concern. Our products comply with the requirements of Directives 2011/65/EU (RoHS 2), 2015/863/EU (RoHS 3) and 94/62/EC (heavy metal concentration levels present in packaging). For more information about our regulatory compliance, please consult our Eco System document, available on request.

PRODUCT OVERVIEW

Description

EvoJet 1900 Cyan	42275
EvoJet 1900 Magenta	42274
EvoJet 1900 Yellow	42272
EvoJet 1900 Black	42273
EvoJet 1900 Light Cyan	43813
EvoJet 1900 Light Magenta	43814
Evowhite 1900	42276
Evoclean	HLM 3556

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MEASURING LIGHT FASTNESS

Light Fastness is usually measured by exposing ink prints under light radiation produced by Xenon tube in comparison with master prints.
Those witness are called Blue Wool.
A standard blue wool textile fading test card is placed in the same light conditions as the sample under test.

A rating between 1 and 8 is awarded by identifying which one of the eight strips on the blue wool standard card has faded to the same extent as the sample under test

1 – denotes extremely poor colour fastness while 8 – is credited as being lightfast and permanent.

EVOJET PROCESS COLOURS RATING:

Evojet Process Colors	
Cyan	7/8
Magenta	7/8
Yellow	7/8
Black	8
Light Cyan	7
Light Magenta	6/7

These values mean that EVOJET inks are suitable for outdoor use for 2 years if placed vertically and referred to the middle European climate.

It is recommended to test the final print in real outdoor conditions.

The Light Fastness of a print is the result of the combination:
Ink light fastness + printing conditions + life cycle conditions

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