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Disperse dyes for sublimation inks & digital inks

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Dye inks are one of the most common type of ink used for ink jet printers. Made by dissolving the colorant in a liquid, these inks have long been used because of their color richness and clarity, and because they are inexpensive to produce, and therefore inexpensive to purchase. Dye inks for Epson printers are extremely popular, pairing great print quality, with intense, durable colors. These inks have always provided the widest variety of colors, especially when other types of inks could only provide a few different colors.

While not as water-resistant or weather-resistant as other inks on the market, dye sublimation ink for Epson, HP, Fuji, and other brands of printers are popular because of their color vibrancy. For the highest-quality and clearest prints, these inks are still the inks of choice. Best for indoor use or for short-term outdoor use, the sheer flexibility of dye ink makes it an excellent choice for many different applications. Recent improvements in dye ink formulation has made them more resistant to color fade and weathering.

While these inks are ideal for a wide variety of application, they are often used for screen and clothing printing, because they adhere well to fabrics. Photo printing of any kind, whether for banners, billboards, displays, etc., has always made use of dye ink, because of the depth and vibrancy of color that it can provide to these materials.

The process of producing disperse dye inks:

Additive
↓
Skyinktex dyes → Stirring & Mixing → Filtration → Performance test → Disperse dye ink

Referenced recipe of disperse dye inks:

Dispersion liquid of Skyinktex dyes (particle size $\leq 200\text{nm}$)

Diglycol
Surfactant
Bacteriostatic agent
Stabilizer
Water

1.HEAT TRANSFER PRINTING PROCESS:

Transfer paper → Ink-jet printing → Printed paper + polyester fabric → Hot-pressing transfer printing → Products

Conditions of transfer printing			
Fabric Name	Temperature of transfer printing	Pressure	Time
Polyester Fabric	190℃-220℃	0.5kg/cm ²	15-30s
Polyester low flexibility Fabric	190℃-220℃	0.5kg/cm ²	15-30s
Three-acetate fiber fabric	190℃-220℃	0.5kg/cm ²	15-30s
Nylon Fabric	190℃-220℃	0.5kg/cm ²	15-30s
Acrylic Fabric	190℃-220℃	0.5kg/cm ²	15-30s
Two-acetate Fabric	190℃-220℃	0.5kg/cm ²	15-30s
Gather propionitrile Fabric	190℃-220℃	0.5kg/cm ²	15-30s

2.DIRECT INK-JET PRINTING PROCESS

Fabric pretreatment → Ink-jet printing → Steaming or heat treatment → Aftertreatment (Washing...etc)



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No.	Product Name (DISPERSE DYES)	Color Sample	Light Fastness	Washing		Sublimation	Perpiration	Rubbing
				Pes	Co			
1	Skyinktex Yellow 3G-EIT		6	5	5	4	5	4-5
2	Skyinktex Red 3B-EIT		6-7	4-5	5	4	5	4-5
3	Skyinktex Blue TP-EIT		5-6	5	4-5	4-5	5	4-5
4	Skyinktex Orange RL-EIT		5	4-5	4-5	4	4-5	4-5
5	Skyinktex Blue R-EIT		7	4-5	4	4	5	4-5
6	Skyinktex Blue 2B-EIT		5-6	5	5	4-5	4-5	4-5
7	Skyinktex Blue 5G-EIT		6	4-5	5	4-5	5	4-5
8	Skyinktex Blue GB-EIT		7	5	5	4-5	5	4-5
9	Skyinktex Brown RL-EIT		5-6	4-5	4-5	4-5	5	4-5
10	Skyinktex Fluorescent Red EIT		5	4-5	5	4-5	5	4-5
11	Skyinktex Fluorescent Yellow EIT		5	5	5	4-5	5	4-5

Properties:

Excellent dispersion property

Small particle size

Excellent performance for Sublimation inks and digital ink-jet inks

Good Producibility and Brilliance on the dacron fabric