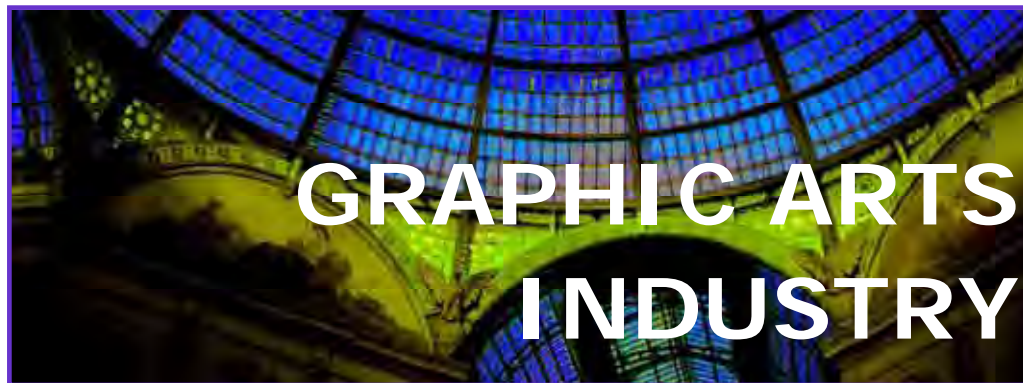


20/09/2011

Information sheets



Radglo® fluorescent pigments for the graphic arts industry



Because of their outstanding brilliance and luminosity, properties that are inherent to fluorescent pigments, RADGLO® colours are particularly useful where an intense and long distance visibility is needed.

These characteristics make them especially applicable for publicity and advertising as well as safety and warning signals.

Typical examples in the graphic arts field are printing packaging and posters, large screen-printed panels or small labels, safety labelling and stationery.

RADGLO® fluorescent pigments offer a variety of qualities in powder and dispersion form, which are tailored for specific formulations and processing procedures.

For screen inks, the recommended pigment types should be used with gram-weights of 10-25 g/m².

In rotogravure a pigment with high colour strength and a fine particle size is needed to give good transfer from the small-etched cylinders into the substrate and to provide a brilliant fluorescent intensity.

In both cases, polar solvent resistant types are selected in order to provide good adhesion of the coloured layer onto materials such as PVC, synthetic films etc...

Formulations with RADGLO® fluorescent pigment dispersions are basically developed to be adjusted with water (AFN) or specific resin vehicles (RBA/RBL).

For stationery specific processing formulations are available on request.



Pigment types per application

Screen inks	Aqueous and non-polar solvent formulations	JST/VSF-0-01[Ⓞ]/GWT[Ⓞ]
	Polar solvent formulations	P-09/PS/PC/GRT[Ⓞ]
Flexographic inks	Aqueous formulations	AFN/STX/VSF-0-01[Ⓞ]
	Solvent formulations	GF/GFS
	UV/EB curable formulations	RBL
Rotogravure inks	Aqueous formulations	JST/AFN/STX/VSF-0-01[Ⓞ]/GWT[Ⓞ]
	Non polar solvent formulations	JST/GWT[Ⓞ]
	Polar solvent formulations	PC/GF/GFS/GRT[Ⓞ]
Offset & letterpress inks	Offset and letterpress formulations	RBA/VSF-0-01[Ⓞ]
	UV/EB curable ink formulations	RBL
Stationary	Pencil leads	JST/PC/GM/VSF-0-01[Ⓞ]/GWT[Ⓞ]/ GRT[Ⓞ]
	Water based pen ink formulations	AFN
	Solvent based pen ink formulations	GF/GFS
	Chalk crayons	JST/AFN/VSF-0-01[Ⓞ]/ GWT[Ⓞ]
	Wax crayons	JST/PC/GM/VSF-0-01[Ⓞ]/GWT[Ⓞ]/ GRT[Ⓞ]

Ⓞ Speciality



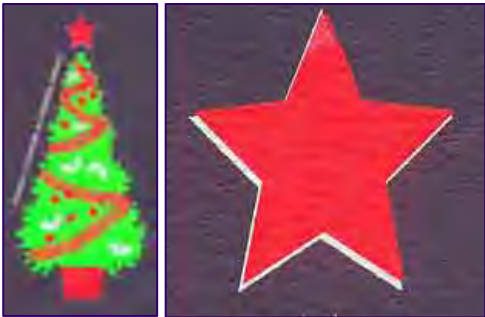
Properties

The different types of RADGLO® fluorescent pigments produce colours, which comply with required and specified shades of various printed materials. Intermediate colours can be produced by blending pigments, with colour hues adjacent in the spectrum.

Because of their semi-transparency, high concentrations of fluorescent pigments are required in order to achieve the desired effect. For the same reason a white base stock for optimum reflectance is also required. This means that on a dark surface, a white colour has first to be printed as showed in this screen print. (The fluorescent layer should cover the white parts completely.)

RADGLO® fluorescent pigments and pigment dispersions satisfy to most indoor and short life outdoor applications. If improved light fastness is required, the UV-stabilized and more lightfast type PS should be chosen.

Besides the physical parameters, such as wavelength, intensity and angle of incident light, fading is very much dependent upon the applied weight of the fluorescent pigment. Higher pigment concentration and thicker printed films will produce the best lightfast results.

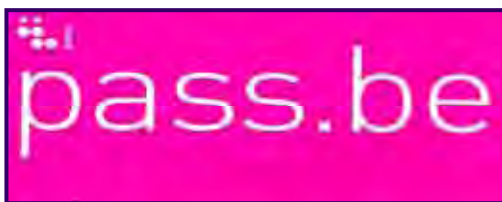


All raw materials should be preferable clean and transparent in order to avoid quenching of colours.

The particle size of RADGLO® fluorescent pigments series is such, that no additional grinding is needed during dispersion. Dissolver type mixing will in general suffice to obtain homogeneous inks with good printing properties.

In aqueous phases, in order to reduce foaming, pigment powder should be stirred into liquids with the highest viscosity still being miscible. During letdown, care should be taken to avoid aeration.

RADGLO® fluorescent pigments also withstand three-roll-milling and glass pearl grinding, although such intense treatments are not required. With all dispersion methods, special attention should be paid to keep the temperature as low as possible, preferably below 40°C. This should be done especially when working with aggressive solvents, since the pigment tends to swell and may cause instability of the ink.



Work of Wim Ricourt in screen print. For more information about one of our most important Belgian artists see on: www.wimricourt.be

Radglo® Specialities

- * *Dye programme*
- * *Solid state fluorescent pigment: VSF-0-01*
- * *50% Waterdispersions of JST pigments: WR series*

® = registered trademark

Disclaimer: This technical information is just an advice. No warranty of fitness for a particular purpose is made.



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