



## *Technical Information*

Applications:

### **Product description**

RADGLO® finger paints pigments are thermoset fluorescent pigments, recommended for a wide range of applications where resistance to strong solvents and temperature is needed.

They may also be used in water based latex systems, where long term shelf stability is required.

### **Chemical composition**

RADGLO® finger paints pigments are composed of a solid solution of dyestuffs in a thermoset sulphonamide-melamine-paraformaldehyde resin.

RADGLO® fluorescent pigments as such are not classified in the Colour Index (CI), but certain colour components are.



### **Standard colours**

P-09: UV Blue

PS-10: Chartreuse

PS-11: Green

PS-29: Blue

PC-88: Purple

### **Available colours**

PS-3-1007: Orange

PS-5-0543: Red

PS-5-0994: Red

PS-7-0984: Pink

P-X-0936: UV Green

*Finger paints*

### **Physical properties**

- Melting point: Thermoset, non-melting
- Decomp.T°: >300°C
- Spec. Gravity: 1.4 g/ml
- Bulking value: 0.25g/ml
- Average particle size: 5µm
- Hegman grind: 6.0-5.0  
(Exception PC-88: 5.5-6.5)
- Oil absorption: 56

## *Regulatory and Ecotox information*

All components of RADGLO® finger paints pigments are registered in EINECS. All components as well as the polymeric resin of the finger paints pigments are registered in TSCA.

RADGLO® finger paints pigments are in conformity with the purity requirements of EN71 finger paints.

RADGLO® finger paints pigments are basically free from heavy metals. For detailed information, please consult the individual MSDS.

## *Lightfastness & Heatstability*

### **Lightfastness**

Fluorescent pigments are more fugitive than conventional pigments. They are stable to indoor light or outdoor conditions other than direct sunlight. By exposure to outdoor sunlight the colour will change, whereby the degree of fading is depending on following factors:

- Colour of the pigment
- Pigment loading and thickness of the endproduct. The higher the pigmentloading and thickness, the better the lightfastness.
- Type of binder polymer
- Intensity and angle of the incident sunlight.

**The lightfastness may be improved by including UV-absorber(s) in the formulation and/or by making use of clear overcoats containing UV-absorber(s).**

### **Heatstability**

RADGLO® finger paints pigments can be used for short dwell times in applications with processing temperatures up to 180°C (plasticized PVC formulations) without affecting the colouristic properties.

## *Applications & Storage*

### **Applications**

In view of the thermoset nature of RADGLO® finger paints pigments, these pigments are especially recommended for applications demanding improved resistance to polar solvents, plasticizers, heat, pressure and migration.

Typical applications are:

- finger paints

### **Storage**

RADGLO® finger paints pigments remain stable provided they are kept in a dry storage place at temperatures < 50°C.

## *Processing conditions and specific considerations*

RADGLO® finger paints pigments are easy dispersable and do not require additional grinding for proper dispersion into binder systems.

Check on beforehand the compatibility of RADGLO® finger paints pigments in the solvents of your formulations. Use the solubility table on next page as a guideline. Specific guideline formulations are available upon request.

## Solubility and bleeding data

### Effects of solvents and plasticizers on RADGLO® fluorescent pigments, used for coatings, printing inks and paints.

Fluorescent pigments in mixtures of various solvents or exposed to higher temperatures should be carefully tested prior to use. All data are average values per series and may vary per colour.

#### Testmethod solubility (S):

1 gram of pigment dispersed in 10 ml of solvent; after stirring 1 minute, the mixture is left at 38°C over 30 minutes. The solvent attack on the resin indicates the solubility.

The higher the number (5) the better.

<b>5</b>	Insoluble
<b>4</b>	Very slightly soluble
<b>3</b>	Slightly soluble
<b>2</b>	Fairly soluble
<b>1</b>	Completely soluble

#### Testmethod bleeding (B):

1 gram of pigment dispersed in 10 ml of solvent; after stirring 1 minute and storage for one week at room temperature, the mixture is filtered. The transmission % is measured of a 50 times diluted filtrate.

The higher the number (5) the better.

<b>5</b>	Absolutely none
<b>4</b>	Very slight
<b>3</b>	Slight
<b>2</b>	Moderate
<b>1</b>	Heavy

		Finger paints pigments	
		S	B
<b>ALIPHATIC HYDRO CARBONS</b>	Mixed pentanes	5	5
	Mixed hexanes	5	5
	Heptane	5	5
	Destillates 35-260°C	5	5
<b>AROMATIC HYDRO CARBONS</b>	Ethylbenzene	5	4
	Toluene	5	4
	Xylene	5	4
	Destillates 150-250°C	5	4-5
<b>ALCOHOLS</b>	Methyl alcohol	5	3
	Ethyl alcohol	5	2-3
	Isopropyl alcohol	5	4
	Butyl alcohol	5	3
	Cyclohexanol	5	3
	2-Ethylhexanol	5	4
	Diacetone alcohol	3	2
<b>KETONES</b>	Acetone	3	2
	Methyl ethyl ketone (= MEK)	3	2
	Methyl iso butyl ketone	4	3
	Ethyl butyl ketone	4	3
	Diisobutyl ketone	4	3
	Cyclohexanone	2	2
	Isophorone	2	2
<b>ESTERS</b>	Ethyl acetate	4	2-3
	Iso/n-Propyl acetate	4	3
	n-Butyl acetate	5	3
<b>GLYCOLS &amp; ETHERS</b>	Glycerine	5	5
	Ethylene glycol	5	2-3
	Diethylene glycol	5	3
	Monopropylene glycol	5	4
	Dipropylene glycol	5	1
	Ethylene glycol monoethyl ether	4	1
<b>CHLORINATED SOLVENTS</b>	Carbon tetrachloride	5	4-5
	Trichloroethylene	5	3
	Perchloroethylene	5	3
	Chlorobenzene	5	2-3
	Methylene chloride	2	1
	Ethylene chloride	2	2-3
<b>PLASTICIZERS</b>	Dibutyl phthalate	5	4
	Diocetyl phthalate	5	4
	Diisodecyl phthalate	5	4
	Diocetyl adipate	5	4
	Diocetyl sebacate	5	5
	Castor oil	5	5
	Epoxidezed soya oil	5	5

## Available (standard) colours & package of the finger paints pigments:

COLOUR	PS	Others
Chartreuse	PS-10	
Green	PS-11	
Orange	PS-3-1007	
Red	PS-5-0543	
Red	PS-5-0994	
Pink	PS-7-0984	
Purple	-	PC-88
Blue	PS-29	
UV Blue	-	P-09
UV Green	-	P-X-0936

  

Similar codes in the different series offer a comparable colour but are not 100% identical. Colour may depend on the specific formulations of the customer.		
<b>Package for P-09, PS-10, PS-11, PS-29 &amp; PC-88:</b>	<b>Bags containing:</b>	
1 box = 20 kg	2 x 10 kg	= Minimal order
1 boxpallet = 250 kg	25 x 10 kg	
<b>Package for PS-3-1007, PS-5-0543, PS-5-0994, PS-7-0984 &amp; P-X-0936</b>		
1 batch size	10 kg bags	= Minimal order

® = registered trademark

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



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