

## 56000 - 56450 Fluorescent Pigments

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

Fluorescent pigments are composed of a solid solution of dyestuffs in a thermoset sulphonamide-melamine-paraformaldehyde resin. These pigments are as such not classified in the Color Index (CI), but certain color components are (confidential).

### Physical Properties

Melting point	Thermoset, non-melting
Decomposition temperature	> 300°C
Specific gravity	1.4 g/ml
Bulking value	0.25 g/ml
Oil absorption	56

Average particle size:

56000 – 56400: 5 µm  
56150 / 56450: 3 µm

Hegman grind:

56000 – 56400: 6.0 – 5.0  
56150 / 56450: 6.5 – 5.5

### 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 color will change, whereby the degree fading is depending on following factors:

- Color of the pigment
- Pigment loading and thickness of the end product. The higher the pigment loading 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).

### Heat Stability

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

### Application

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



Typical applications are:

- Screen inks
- Gravure inks
- Textile printing inks
- PVC plastisols and organosols

### **Regulatory and Ecotox Information**

All components of the fluorescent pigments as well as the polymeric resin are registered in EINECS. These pigments are in conformity with the purity requirements of EN 71 part 3.

Fluorescent pigments are basically free from heavy metals.

### **Storage**

Fluorescent pigments remain stable provided they are kept in a dry storage place at temperatures < 50°C.

### **Solubility and Bleeding Data**

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

Fluorescent pigments in mixtures of various solvents