



## PHOTOLUMINESCENTS PIGMENTS LUMINANCE MEASUREMENTS

### STANDARD RANGE (COLORLESS PIGMENTS OF DAYS)

COLORS		Ref	Size	Performances	Luminance			Extinction (0,3 mcd/m <sup>2</sup> )
Day	Night				1 minute	10 minutes	60 minutes	
-	GREEN	YmO-10B	72µm-96µm	++	4310	707	128	8490min
		YmO-10C	48µm-72µm	++	4540	588	116	8011 min
		YmO-10D	36µm-48µm	+++	3590	555	105	6521 min
		YmO-10W	36µm-48µm	+++	3590	555	105	6521 min
		YmO-7	15µm-35µm	+++	1810	265	55	4966 min
		YmO-5E	5µm-15µm	++	NC	NC	NC	NC
		YmO-HE	1µm-5µm	++	NC	NC	NC	NC
		YmO-HDW	5µm-20µm	++	NC	NC	NC	NC
-	BLUE-GREEN	YmB-7C	48µm-72µm	+++	2400	380	90	-
		YmB-7D	36µm-48µm	+++	2050	340	75	-
		YmB-W	36µm-48µm	++	2050	340	75	-
		YmB-7E	25µm-35µm	++	1610	259	30	-
		YmB-7HDW	5µm-20µm	++	NC	NC	NC	-
-	BLUE	YmS	25µm-35µm	-	850	210	18	-
		YmS-W	36µm-48µm	-	1400	310	28	-
		YmS-HDW	5µm-20µm	-	NC	NC	NC	-
-	PURPLE	YmV-7E	25µm-35µm	---	350	90	16	NC
		YmV-7W	36µm-48µm	-	488	122	22	NC
-	WHITE	YmO-1W	20µm-40µm	-	790	140	14	NC
-	YELLOW	YmOY	20µm-40µm	--	510	125	5	NC
-	ORANGE	YmRO	20µm-40µm	--	490	120	5	NC
-	RED	YmR	20µm-40µm	--	420	76	3	NC

### S RANGE – HIGH PERFORMANCES

COLORS		Ref	Size	Performances	Luminance			Extinction (0,3 mcd/m <sup>2</sup> )
Day	Night				2 minutes	10 minutes	60 minutes	
-	GREEN	LBG-2030S	30µm	+++	2408	595	73	5841 min
		LBG-3040S	35µm	+++	2881	722	91	7211 min

### NEON RANGE (COLORED PIGMENTS OF DAY)

COLORS		Ref	Size	Performances	Luminance			Extinction (0,3 mcd/m <sup>2</sup> )
Day	Night				1 minute	10 minutes	60 minutes	
GREEN	GREEN	NPP-VV	5µm-35µm	++	1600	240	40	4500
YELLOW	GREEN	NPP-YG	5µm-35µm	++	1600	240	40	4500
ORANGE	YELLOW	NPP-OY	5µm-35µm	++	1600	240	40	NC
BLUE	BLUE-GREEN	NPP-BB	5µm-35µm	+	1400	215	30	NC
BLUE	GREEN	NPP-BG	5µm-35µm	++	1600	1240	40	4500
PINK	ORANGE	NPP-RO	5µm-35µm	++	1400	215	30	4500
PINK	PURPLE	NPP-RV	5µm-35µm	-	340	85	14	NC
PINK	PINK	NPP-RR	5µm-35µm	+	1300	190	30	NC

*Discover all pigments, packings and prices from 15g to 25kg: [Click here](#)*

Measures after sample lighting with Fluo lamp 1000lux / 10min

The above technical data have been obtained by tests in accordance with DIN67510 Part I, measures expressed in microcandelas / m<sup>2</sup>. Extinction refers to the time in minutes required for the luminance ratio is reduced to 0.32 mcd / m<sup>2</sup> from the moment when the excitation is stopped by the light.

# Phosphorescent pigments

Extra long glow phosphorescent pigments



## PRESENTATION:

The phosphorescent pigments have the capacity to store the light and to re-emit it:

They charge when exposed under a light source (sunlight, electric light, or UV) and release gradually the energy by glowing in the dark.

Our pigments are from the latest generation and represent the most efficient grade of photoluminescent materials in term of restitution rate.

Definition: The name phosphorescent covers in general all types of pigments that emit light thanks to a luminous excitement. We will then talk about phosphorescent pigments to be more precise.



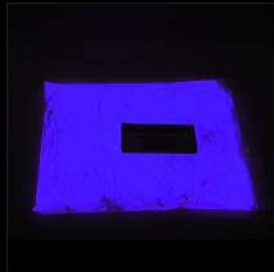
**Vert**  
High luminance  
Solvent or Waterbased  
All particle sizes



**Turquoise (Blue-Green)**  
Good luminance  
Solvent or waterbased



**Bleu**  
Low Luminance  
Solvent or Waterbased



**Violet**  
Low Luminance  
Solvent or waterbased



**White**  
Low Luminance  
Solvent only



**Orange**  
Low Luminance  
Solvent only



**Red**  
Short Luminance  
Solvent only



Colours	Luminance en mcd/m <sup>2</sup> après			
	1MIN	10MIN	60MIN	Lum
Green	2300	358	58	9000
Blue Green	1400	280	44	5400
Blue	63,5	140	26	5000
Violet	41	10	2	380
White	520	69	12	1000
Orange	480	34	2	
Red	400	18	2	

Measurements :  
Tests according DIN67510 Part I.  
Luminance (Lum) = Time for total extinction ( 0,32mcd/m<sup>2</sup> )

# Phosphorescents Pigments: Technical Data File

## LUMINANCE:

The pigments glow over a variable period of time and in a quick decay curve, that will stabilize itself during long hours. The luminance is measured in microcandela/sqm.

The luminance can totally extinguish days after an excitement to light.

The intensity of the glow will depend of the size of the pigment particle and of its colour: Green particles are larger and will glow longer.

## ASPECT:

The pigment powders are **colourless** during the day: From a greenish white (for the green and blue-green colours) to a perfect white (for all others colours).

A "coloured by day" version is also available.

## COMPOSITION:

The photoluminescent pigments Arco Iris with their particular structure of crystal are made from "rare earth elements" (Aluminates and Europium Carbonates/Strontium desactivated). Their luminescence is 10 times higher than those of conventional phosphorus/zinc sulfide based pigments



## SAFETY:

The product is non-toxic, harmless and non-radioactive. Product not considered to be hazardous (As for our analysis certificates)

They are completely harmless and are completely safe in consumers products such as clothes, shoes, helmets, toys, watches, switches, fishing tools, sporting goods...

## RESISTANCE:

Our phosphorescent pigments have a life span of 10 to 20 years. They have a great physical and chemical stability (temperature >1300°C, resists well to UV light). Direct contact with metals and water can accelerate quickly their degradation.

## APPLICATION:

Photoluminescent pigments are widely used in industries in manufacturing paints, **injection and moulding, silkscreen painting, luminous panels, tapes or films, ceramic tiles** etc.

Different technical and artistic purposes can be achieved due to their characteristics.

Their lifetime, their ease of use and their infallibility are highly valued for the production of safety products.

## TYPE OF PIGMENTS and COMPOUNDS (Masterbatch)

We deal with the biggest choice of pigments, available in several models according to their colours, the size of the particles and their type (**solvent or water based**)

We also produce a range of pigments coloured by day (please contact us by email only) and various types of **Plastic compounds**.

## TECHNICAL SPECIFICATIONS:

Glow colour : Green , Bleu-Green, Blue, Violet, Red, Orange, White

Glow decay : Up to 12h after excitation

Density : 3.5+/-0.1 g/cm<sup>3</sup> - Humidity: 0.5 %

Available particle size:

5-15µm; 15-35µm, 35-45µm, 45-65µm, 60-100µm , 100-250µm , >500µm



# NEON

## Phosphorescent pigments

The NEON Range is made with phosphorescent pigments which are special because they display a colourful appearance both during the day and at night.

This is indeed a particular property, as all natural phosphorescent pigments are a white or yellowish powder (under light).

The colour pigments by day have a lower luminous intensity (about 25%) in comparison to the colourless phosphorescent natural pigments by day



#### Ref Colour during the day/night

NPP-VV: Green/Green  
NPP-YG: Yellow/Green  
NPP-OY: Orange/Orange  
NPP-BB: Blue/Turquoise  
NPP-BG: Blue/Green  
NPP-RO: Pink/Orange  
NPP-RV: Pink/Purple  
NPP-RR: Pink/Pink

Available packagings:  
15g, 330g, 1kg or 25kg

#### Use:

by mixing only, in all transparent media  
such as resins, binders, topcoats, plastics

#### Resistance:

The phosphorescent property has excellent temperature resistance (up to 800 °C) and provides durability for at least many decades (if the pigment is stored in its packaging, or immersed in its resin). The colour "by day" cannot withstand more than 200 to 250 °C, and cannot be exposed to sunlight

Composition: Strontium aluminate and dyes