

Phosphorescent pigments



Description

The Arco Iris phosphorescent pigments are part of the photoluminescent pigment family. They produce luminescence through the absorption of optical radiation (excitation). The pigments are made of inorganic luminescent compounds which absorb the ultraviolet, visible and infrared light waves. Using a molecular phenomenon, they slowly continue to release the stored energy with a decreasing proportion, in the form of luminescence in the visible spectrum.

Appearance and odour

The phosphorescent pigments are provided as a colourless and odourless powder (light colour (yellowish or greenish white) or colourless under ordinary light). They are semi-transparent and have low covering power.

Appearance in the dark. GREEN and TURQUOISE are the most visible and persistent colours.

The other phosphorescent colours have a low luminance and persistence.

Colours can be mixed, according to the rules of the "light-colours"

PHOSPHORESCENT COLOURS

Colours	Luminance measured in mcd/sqm after			
	1MIN	10MIN	60MIN	Lum
GREEN	2300	358	58	9000
TURQUOISE	1400	280	44	5400
BLUE	63,5	140	25	5000
PURPLE	41	10	2	380
WHITE	520	69	12	1000
ORANGE	480	34	2	
RED	400	18	2	

Application

The phosphorescent pigments are valuable in the areas of safety marking, formulation of inks and paints, adhesives, plastics, granules and other materials such as synthetic fibers.

Chemical and physical properties:

COMPOSITION: Aluminum oxides/Strontium oxides

MELTING POINT: > 1100°C

AVERAGE PARTICLE SIZE: 5-100 µm

SOLUBILITY IN WATER: 0,3g/L at 20°C

APPROXIMATE DENSITY: 3.0

PH (% in water): 10-11 at 20°C

Do not contain any radioactivity. Non-toxic/non-harmful under normal conditions of use.

Mixing and compatibility:

Do not grind. Simply mix by incorporation, and/or through agitation. Do not use metallic vessels and prefer ceramic or plastic tanks. The pigments are solid and not soluble. Mixing ratio: up to 30% by weight in any transparent media (resins, binders, plastics, glass, ink). Perfect compatibility with solvent-based media. Good compatibility with aqueous media for Hydro waterproof pigments.

Measures

Refer to the table of measurement data

Storage, stability and resistance:

Our phosphorescent pigments offer superior resistance to light (UV degradation) and a very good stability against heat, sufficient for most uses. This resistance provides high performance over extended periods of time. Kept in their packaging under normal ambient conditions or incorporated into a protective medium (resin, plastic, glass...), the pigments retain their original colours and intensity for several decades. Avoid direct contact with metals, water and acids. For aqueous mixtures, use our waterproof pigments.

We do not guarantee the specific product properties or their suitability for a particular mixing method or destination. We recommend that each user conducts tests on each product before implementation. We also recommend that the products be handled by trained technicians to ensure maximum safety.