

发光颜料 Phosphorescent Pigments



长余辉发光颜料（夜光粉）是一种以稀土激发的碱土铝酸盐（例如铝酸锶）为基础的光致储能发光材料，该产品在受到太阳光及人工光源，特别是紫外线激发时，而吸收贮存能量，并将吸收的能量

转化为可见光，在激发停止后可继续发光的物质，形成在黑暗中发光的效果。这类发光颜料比传统的硫化锌类夜光粉具有更长的发光时间，且无放射性、无毒无害、几乎无气味。

Our long afterglow phosphorescent pigments are based on rare earth doped strontium oxide aluminate chemistry. These pigments can absorb sunlight, artificial light, especially UV light and

re-emit the light in the darkness with different colors. These pigments have much longer afterglow time than zinc sulfide types and are non-radioactive, non-toxic materials and nearly odorless.

特点

- ▲ 发光时间长、亮度高
- ▲ 多种发光颜色
- ▲ 应用广泛、容易分散
- ▲ 经处理可做到水系体系稳定、塑胶用不发黑
- ▲ 无放射性、无毒无害

应用领域与市场

涂料（油漆）

- 各种水性、油性体系涂料（油漆）、标记漆
- 织物涂层（PU、PVC、丙烯酸）
- 自喷漆（气溶胶）
- 艺术、美术画材
- 粉末涂料

塑胶

- 各种塑料注塑、挤出、滚塑等
- 发光母粒、化纤
- PVC溶胶、压延、亚克力、PET膜
- TPE、TPU、橡胶、硅胶等

印刷油墨

- 丝网印刷油墨
- 其他印刷油墨

其他

- 蜡笔、粉笔、蜡烛
- 彩泥、史莱姆等
- 玻璃、陶瓷、陶釉

Features

- ▲ long afterglow time, excellent luminescence
- ▲ Various colors
- ▲ Wide applications, easy to disperse
- ▲ Water-based grades available
- ▲ Non-radioactive, non-toxic

Applications and markets

Paints & Coatings

- Water & solvent based paints, marking paints
- Fabric coatings
- Aerosols
- Artist paints / hobby paints
- Powder coating

- Injection / extrusion / casting molded plastics
- Masterbatches
- Vinyl plastisols / calendaring
- TPE / TPU / rubber / silicone

Printing Inks

- Screen printing inks

Miscellaneous

- Crayons / chalks / candles / clays / playdough
- Glass / ceramics / glaze

Plastics

我们的发光颜料主要有三个粒径范围

▲ **大粒径：45-100 微米（200-300目）**

- 颗粒较大
- 亮度高、余辉长
- 较适用于油漆、喷涂、蜡烛、玻璃、陶瓷等

▲ **中等粒径：15-45 微米（300-400目）**

Our phosphorescent pigments generally come into three particle size groups.

▲ **Large: 45-100 um or 200-300 mesh size**

- Relatively large particle size
- Very high afterglow intensity
- Suitable for applications such as brush paint, spray paint, candle making, and glass molding

▲ **Medium: 15-45 um or 300-400 mesh size**

- Relatively moderate particle

- 中等大小颗粒
- 亮度、余辉较好
- 较适用于丝网印刷油墨、塑胶以及夜光母粒

▲ **小粒径：5-10微米（500-1000目）**

- 粒径细微
- 亮度较低
- 较适用于要求小粒径的应用领域，如发光化纤和一些印刷油墨

size

- Moderate afterglow intensity
- Suitable for applications such as silk-screen printing molded plastics and masterbatches

▲ **Fine: 5-10 um or 500 mesh size**

- Relatively small particle size
- Moderately low afterglow intensity
- Suitable for certain applications that require very fine particle size such as thread/fiber production and some printing inks

基本产品系列

产品系列	外观颜色	发光颜色	平均粒径	发光时间（小时）
Series	Body Color	Glowing Color	Average Particle Size	Durable Time (hours)
PG-10	浅黄色 Light yellow	黄绿色 Yellow green	10~80μ	10~16
PG-10W*	浅黄色 Light yellow	黄绿色 Yellow green	10~80μ	10~16
PG-20	浅黄绿色 Light yellow green	蓝绿色 Blue green	10~80μ	8~14
PG-20W*	浅黄绿色 Light yellow green	蓝绿色 Blue green	10~80μ	8~14
PG-30	浅白色 White	天蓝色 Sky Blue	10~80μ	6~12
PG-40	浅白色 White	多种颜色 Various colors	10~80μ	6~8
PG-50W*	多种颜色 Various colors	多种颜色 Various colors	20~80μ	1~2

1: 外观颜色根据粒径大小略有不同。 Body colors might be slightly different depending on particle sizes.

2: 各系列均有不同粒径可供选择用在不同领域。 Each series has different particle sizes available.

3: 各系列根据不同品质与粒径大小发光时间有所不同。 Durable time depends on different qualities and particle sizes.

Product range

多达 **7** 个系列

超过 **13** 种发光颜色

超过 **100** 种规格

Over **7** Series

Over **13** glowing colors

Over **100** grades

发光颜料 Phosphorescent Pigments

**GLOW
In the dark**



基本产品系列与应用

General grades and applications

		PG-10 Series	PG-10W Series*	PG-20 Series	PG-20W Series*	PG-30 Series	PG-40 Series	PG-50W Series*		
聚烯烃及其他塑胶、色母粒等	PP/LDPE/HDPE	●	●	●	●	●	◎	◎	PP/LDPE/HDPE	Molded plastics and master batches
	PVC/TPU/TPE/硅胶	◎	●	◎	●	●	●	●	PVC/TPU/TPE/silicone	
	PS/ABS/PC/PMMA/PET/环氧树脂	◎	●	◎	●	◎	●	◎	PS/ABS/PC/PMMA/PET/epoxy	
PVC塑溶胶、PVC、PU涂层	PVC/PU/丙烯酸涂层、皮革	◎	●	◎	●	●	●	●	PVC/PU/acrylic coating	Plastisol/ organosol PVC/PU/acrylic coatings, PVC calendering
	乳胶	◎	●	◎	●	●	●	●	Latex	
	PVC塑溶胶	◎	●	◎	●	●	●	●	PVC plastisol	
	PVC压延膜	◎	●	◎	●	●	●	●	PVC calendering	
涂料、油漆、自喷漆	水性及弱溶剂体系	◎	●	◎	●	●	●	●	Water or mild solvent-based	Paints & coatings, aerosols
	强溶剂体系	●	●	●	●	●	●	●	Polar solvent-based	
	粉末涂料	◎	◎	◎	◎	◎	◎	◎	Powder coating	
	纺织色浆	◎	●	◎	●	●	●	●	Textile printing	
丝网印刷油墨	水性及弱溶剂体系	◎	●	◎	●	●	●	●	Water or mild solvent-based	Screen printing inks
	强溶剂体系	●	●	●	●	●	●	●	Polar solvent-based	
	塑溶胶	◎	●	◎	●	●	●	●	Plastisols	
其它	彩铅、蜡笔、蜡烛、粉笔	◎	●	●	●	●	●	●	Pencil lead/crayon /wax /chalk	Miscellaneous
	彩泥、粘土、太空沙、水晶泥、史莱姆等	●	●	●	●	●	●	●	Modeling clay/play dough/slime	
	陶瓷、陶釉、玻璃等	◎	◎	◎	◎	◎			Ceramic/glaze/glass	

● 推荐使用 Recommended ◎ 可能适用 To be tested

* PG-10W、PG-20W系列比PG-10、PG-20系列在水性体系中更稳定。

* PG-10W, PG-20W Series are more stable in water-based formulations than PG-10, PG-20 Series

具体信息可参考相应系列的产品技术说明书或者联系我们的销售人员。For more details please refer to the TDS of each series or contact our team.