



# Shanghai King Chemical Co.,Ltd

Tel: +86-21-67817854 Fax: +86-21-67817855

Address: ROOM CDEF , 9th Floor, Building D, Weijing Center Tower  
NO.2337 GuDai Road, Minhang District, Shanghai, China

## TECHNICAL DATA SHEET

### HZ Series daylight fluorescent

#### Introduction:

HZ pigments have excellent brightness good heatstability and less plateouts. They are recommended for applications in injection moldings,blow moldings,where strong colors and lightfastness are needed as well as no formaldehyde release during processing. HZ is compatible with various types of polymers.

#### Features and Benefits:

- Compatible with many polymers in general use.
  - Recommended processing temperature 180 - 260°C .
  - Heavy metals meet EN 71-3 requirements for toys;
- RoHS and phthalate content compliant

- Melt-in for injection /extrusion/blow molded plastics
- Coloring for various polymers(PP,PE,PS). Test in production scale is suggested before application is a particular polymer.

#### Applications:

#### Available Colors:

|       |            |       |               |
|-------|------------|-------|---------------|
| HZ-11 | Pink       | HZ-16 | Orange yellow |
| HZ-12 | Cerise     | HZ-17 | Yellow        |
| HZ-13 | Red        | HZ-18 | Green         |
| HZ-14 | Red orange | HZ-21 | Magenta       |
| HZ-15 | Orange     |       |               |

#### Physical & Chemical Properties:

HZ pigment is a dyed / pigmented polyamide thermoplastic copolymer.

Average Particle Size  $\leq 100\mu\text{m}$

Application temperature 180 - 260°C

Softening Point  $\geq 120^\circ\text{C}$

#### Lightfastness:

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

- Color of the pigment
- Type of binder polymer
- Intensity of the incident sunlight.
- Pigment loading and thickness of the end product. The higher the pigment concentration is, the better the lightfastness is.

**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:

If used in general plastic applications HZ pigments can perform well processing temperature below 260°C.It may stand higher temperature but test is needed.Heatstability also depends on length of time during procedure.

#### Additives:

Certain metal ions and nucleated polymers are known to cause color changes and loss of brightness with fluorescent colorants.Studies have shown that plastics processing additives containing “free” zinc,magnesium,calcium and iron will cause deleterious color effects when used in conjunction with HZ pigments.If a metal containing additive must be used,it should be thoroughly tested to make sure the color stability of HZ pigments.

#### Storage:

HZ fluorescent pigments are delivered in cartons with PE lining,net weight 25kg. It should be kept in cool place and away from heat.All opened bags should be carefully resealed immediately after use.

#### Toxicity:

HZ fluorescent pigments are essentially non-toxic and non-hazardous with zero formaldehyde emission and extremely low heavy metal content. Safety data sheet (SDS) is available upon request.