

# Technical Information

Long Afterglow Pigment

## Typical Chemical Properties

**Trade Name:** N50000-D  
**Chemical Formula:** ZnS:Cu  
**Insoluble in:** Water, Organic Solvents  
**Moisture:** <0.2%  
**Decomposition by:** Strong Acids  
**pH (Aqueous Solution):** Approximately 10

## Typical Physical Properties

**Appearance:** Crystalline Yellowish White Fine Powder  
**Body Colour, CIE Colour Coordinates:** x=0.341 ( $\pm$  0.010), y=0.372 ( $\pm$  0.010)  
**Specific Gravity:** 4.08 gr/cm<sup>3</sup>

### Particle Size Distribution in $\mu\text{m}$

D10	D50	D90	DTop
16.0 $\pm$ 3	30.0 $\pm$ 3	50.0 $\pm$ 3	105.0

## Typical Phosphorescent Properties

**Phosphorescence Colour:** Yellowish Green  
**CIE Colour Coordinates:** x=0.295 ( $\pm$  0.010), y=0.535 ( $\pm$  0.010)

### Phosphorescence Values in mcd/m<sup>2</sup>

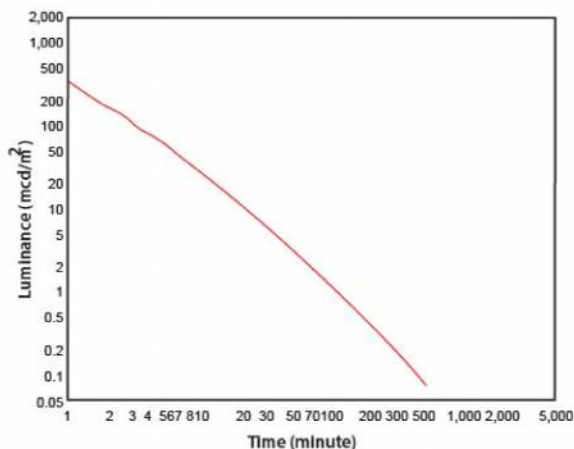
1 min	10min	20min	30min	60min	0.32mcd/m <sup>2</sup>
360	28.5	12.0	7.1	2.8	400min

Tested according to DIN 67510 (part1)

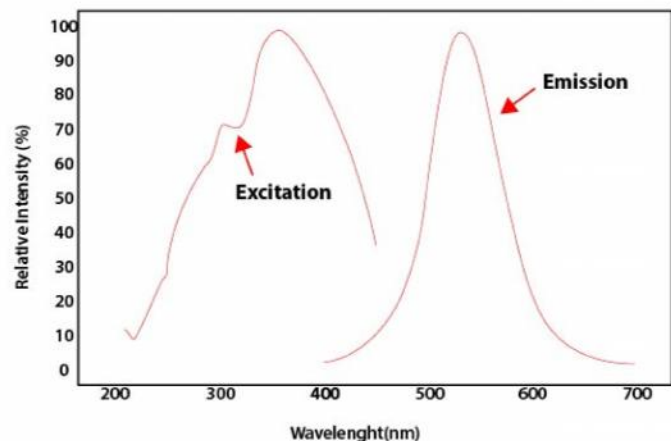
## Typical Excitation and Emission Spectrum

**Excitation:** UV light, Day light, Fluorescent lamp  
**Emission Peak Wavelength:** 526nm ( $\pm$ 3)

Afterglow Characteristics



Excitation & Emission Spectra



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