

## Material Safety Data Sheet (MSDS)

### 01. FIRM AND PRODUCT IDENTIFICATION

**Commercial product name:** photoluminescent pigment

**Application fields:**

the photoluminescent pigment is Suitable for various kinds of transparent medium, such as paint, screen printing, plastic, coating, powder coating, ink, enamel and leather procesing and printing etc. To produce luminous products with good indicating and beautifying effect in darkness. It can be widely used in emergency signs, pass ways signs, switches, enamel nameplate, road signs, toys, Leather, handcrafts, clock meter panels, textile.

### 02. COMPOSITION/INFORMATION ABOUT COMPONENTS

**Characterisation:** strontium aluminate europium doped

**Components:** Sr4Al14O25:Eu,Dy,B

### 03. IDENTIFICATION OF EVENTUAL HAZARDS

this material safety data sheet(MSDS) has been prepared in compliance with tie federal osha hazard communication standard 29 cfr 1910.1200.this product is considered to be a non-hazardous substance under that standard.

### 04. MEASURES OF FIRST AID

After

- **inhalation:** Remove to fresh air.
- **eye contact:** Flush with water for 5 minutes.
- **skin contact:** wash off with soap & water.
- **swallowing :** Flush the mouth with water.
- **ingestion:** Drink quantities of water & induce vomiting

### 05. MEASURES IN CASE OF FIRE

**Suitable extinguishing media:** water/foam/ABC powder/carbon dioxide.

**Extinguishing media that must not bed for safety reasons:** none

**Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:**  
None.

**Special protective equipment for fire fighting:**

fire fighters should wear self-contained breathing apparatus when fighting chemical fires. Use water spray to cool nearby containers and structures exposed to fire. This product will not burn. use appropriate techniques to fight surrounding fire..

**Additional information:** fire residues and contaminated fire fighting water must be disposed of in accordance with the local regulations.

### 06. MEASURES AFTER SPILLAGE OR ACCIDENTAL LEAKAGE

**personal precautions:** use personal protective clothing. Avoid dust formation. Knock down dust with water spray jet.

**Environmental precautions:** wrap appropriate protective equipment, avoid the generation of dust, vacuum or shovel material and material and place in close able container(s) for disposal.

**Methods for cleaning up/taking up:** pick up mechanically. When picked up, treat material as prescribed under heading "Disposal".

**Additional information:** information regarding safe handling, see chapter 7. information regarding personal protective measures see, chapter 8. information regarding. Waste disposal, see chapter 13.

## 07. HANDLING AND STORAGE

Observe the usual precautions for handling chemicals.

**Hints on safe handling:** air cleaning with filter of room for dust removable..

**Hints for protection against fire and explosion:** observe the general rules of industrial fire protection.

**Requirements for storage rooms and vessels:** store closed in cool dry area when handling wear protective clothing & respiratory protection. Avoid scatter into the air.

**Storage stability:** storage time >24 months.

## 08. CHECK OF INDIVIDUAL EXPOSITION/PROTECTION

**Additional hints on technical system design:** See chapter 7, no measures exceeding the ones mentioned are necessary.

**Industrial hygiene:** Do not eat or drink during work time. Do not smoke during work time.

**Respiratory protection:** local exhaust/mechanical(general).

**Hand protection:** plastic or neoprene

**Eye protection:** none

**Skin protection:** lab coat

## 09. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** solid powder

**Colour:** Light-yellow or milk-white

**Odour:** none

**Melting point:** 1900

**Flash point/Ignition:** n. a.

**pH-value:** 11~12

**Burning properties:** n. a.

**Density:** app. 3.6 g/cm<sup>3</sup>

**Solubility in water:** little soluble

**Solubility in organic solvents:** insoluble

## 10. STABILITY AND REACTIVITY

**Thermal decomposition:** none

**Hazardous decomposition products:** no hazardous decomposition products known

**Hazardous reactions:** the product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

## 11. INFORMATION OF TOXICITY

**Effects of overexposure:** may cause irritation to eyes, skins & mucous membranes.

## 12. INFORMATION ON ECOLOGICAL EFFECTS

Product is chemically and biological inert. As it does not contain soluble heavy metals, the product does not cause ecological or toxicological problems like other compounds containing heavy metals.

## 13. INFORMATION CONCERNING DISPOSAL

1. **Product:** dispose in accordance with state and local regulations.
2. **European waste catalogue:** the declaration of the waste number must be specified by the branch or process in accordance with the EMC regulations.
3. **Contaminated packaging:** completely empty packaging may be treated as household waste.
4. PL Pigment can be one of additives and added into many medium, such as coat, paint, ink plastic, glass, ceramic etc. PL Pigment can repeatedly absorb energy and emit visible light for over 20 years without any perceivable change of its properties.

## 14. INFORMATION CONCERNING TRANSPORT

**GGVSee/IMDG-Code:- UN-NR:- ICAO/IATA:-**

**GGVE/GGVS:** not classified **ADE/RID:** not classified **ADNR:-**

## 15. INFORMATION CONCERNING REGULATIONS

**labelling in accordance with GefstoffV/EC.:** the product does not require a hazard warning label in accordance with EC directives/German regulations on dangerous substances.

**National requirements: VbF-class:-**

## 16. OTHER INFORMATION

Observe national and local legal requirements

**Sources of documentation:** technical safety constants sorbe; merck index; Welzbacher

**Materials Listings:** Sr<sub>2</sub>CO<sub>3</sub>; Al<sub>2</sub>O<sub>3</sub>; Eu<sub>2</sub>O<sub>3</sub>; Dy<sub>2</sub>O<sub>3</sub>; H<sub>3</sub>BO<sub>3</sub>

**All information this document are concerning the safety requirements of the product. all details are based on our best**

**knowledge to the current situation. However, they do not apply as assurance for quality of the product with regard to liability resp. Guarantee. all details are given without obligation.**