

## Safety Data Sheet

In accordance with CFR 1910.1200 (OSHA HCS)

SDS No. 8780

Review Date: May 08, 2023

### 1 Identification of substance and company

**Product name:** **Zinc sulfide, phosphorescent, green**  
**Product code:** C8780  
**Relevant use and restrictions on use:** Research and product development  
**Manufacturer/Supplier:** Lab Alley LLC  
 22111 Highway 71 West, Suite 601  
 Spicewood, Texas 78669  
 Tel.: 512-668-9918

**Emergency information:** Infotrac: 800-535-5053

### 2 Hazards identification

**Emergency Overview:**  
**Signal word(s):** None  
**Pictogram(s):** None  
**Hazard statements:** None  
**Precautionary statements:** None  
**Hazards not otherwise classified:** None  
**Ingredients of unknown acute toxicity:** None  
**GHS Classification:** Not a hazardous substance or mixture  
**HMIS ratings (scale 0-4):**  
 Health hazard: 1  
 Flammability: 0  
 Physical hazard: 0

### 3 Composition/Information on ingredients

**Chemical name:** Zinc sulfide  
**Designation:**  
**CAS number:** 1314-98-3 (68611-70-1 Zinc sulfide, copper chloride-doped)  
**EC number:** 215-251-3 (271-904-2 Zinc sulfide, copper chloride-doped)  
**Formula:** ZnS  
**Synonyms:** Zinc sulphide, copper chloride-doped  
**Ingredients of known acute toxicity:** None

### 4 First aid measures

**After inhalation:** Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.  
**After skin contact:** Wash off with soap and plenty of water. Consult a physician.  
**After eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
**After ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth out with water. Consult a physician.  
**Information for doctor:** Show this safety data sheet to the doctor in attendance  
**Symptoms/effects; acute and delayed:** May cause skin, eye or respiratory irritation  
**Immediate medical attention and special treatment needed:** No data available

### 5 Fire-fighting measures

**Suitable and unsuitable extinguishing agents:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide  
**Special hazards caused by the material, its products of combustion or resulting gases:** Hydrogen sulfide, oxides of zinc and sulfur (SOx)  
**Special fire fighting procedures:** Wear self-contained breathing apparatus (SCBA) and fully protective fire fighting equipment/clothing  
**Unusual fire and explosion hazard:** No data available

### 6 Accidental release measures

**Person-related safety precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing dust.  
**Measures for environmental protection:** Do not let product enter drains  
**Measures for cleaning/collecting:** Sweep or scoop up and remove. Place in a suitable container for proper disposal.  
**Additional information:** See Section 7 for information on safe handling  
 See Section 8 for information on personal protective equipment  
 See Section 13 for information on disposal  
 See Section 15 for regulatory information

7 Handling and storage	
Information for safe handling:	Avoid contact with skin and eyes. Avoid formation of dust. Use with adequate ventilation.
Information about protection against explosions and fires:	Contact with acids may release hydrogen sulfide, a toxic and flammable gas that may form explosive mixtures in air.
Storage requirements to be met by storerooms and containers:	Keep container tightly closed in dry and well-ventilated place
Incompatibility (avoid contact with):	Strong acids
Further information about storage conditions:	Air and moisture sensitive
8 Exposure controls/personal protection	
Ventilation requirements:	Use with adequate ventilation
Components with exposure limits that require monitoring:	Particulates not otherwise classified: OSHA PEL: 15 mg/m3 (total dust); 5 mg/m3 (respirable)
Additional information:	No further information available
General protective and hygienic measures:	The usual precautionary measures for handling chemicals should be adhered to Keep away from foodstuffs, beverages and food Instantly remove any soiled and impregnated garments Wash hands during breaks and at the end of the work Avoid contact with the eyes and skin
Personal protective equipment:	
Respiratory protection: (Use only NIOSH or CEN approved Equipment)	Filter-dust, fume, mist respirator
Hand protection:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact.
Eye protection:	Safety glasses
Skin protection:	Protective work clothing
Additional protective equipment:	Sufficient to prevent contact. Emergency eyewash and safety shower.
Precautionary labeling:	Wash thoroughly after handling Do not get in eyes, on skin or on clothing Do not breathe dust, vapor, mist, or gas
9 Physical and chemical properties	
Physical state:	Powder
Color:	Bright green
Odor:	Odorless
Odor threshold:	Not determined
Molecular Weight (Calculated):	97.43
pH	Not determined
Melting point/freezing point/range:	1700 C
Boiling point/range:	Not determined
Sublimation temperature/start:	Not determined
Decomposition temperature:	Not determined
Flammability (solid, gas):	Not determined
Flash point:	Not determined
Autoignition temperature:	Not determined
Danger of explosion:	Not determined
Flammable limits:	Not determined
Lower:	Not determined
Upper:	Not determined
Evaporation Rate:	Not determined
Vapor pressure (mm Hg):	Not determined
Vapor density:	Not determined
Specific gravity:	3.98 - 4.10
Bulk density:	Not determined
Solubility in/Miscibility with water:	Insoluble
Partition coefficient n-octanol/water:	Not determined
Viscosity:	Not determined
10 Stability and reactivity	
Reactivity:	No data available
Chemical stability:	Stable under recommended storage conditions
Possibility of hazardous reactions:	No data available
Conditions to be avoided:	Heat See section 7 for information on proper handling and storage
Materials to be avoided:	Strong acids
Dangerous reactions:	No data available
Hazardous decomposition products: (thermal and other)	Hydrogen sulfide, oxides of zinc and sulfur (SOx)

#### 11 Toxicological information

LD/LC50 values that are relevant for classification:	oral-rat LD <sub>50</sub> : >2g/kg inhalation-rat LC <sub>50</sub> : >5040 mg/m3/4H skin-rat LD <sub>50</sub> : >2 g/kg
Irritation or corrosion of skin:	No data available
Irritation or corrosion of eyes:	No data available
Primary irritant or corrosive effect:	
on the skin:	Mild
on the eye:	Mild
Sensitization:	No data available
Potential health effects:	
Inhalation:	May cause irritation
Ingestion:	No data available
Skin:	May cause irritation
Eyes:	May cause irritation
Signs and symptoms of exposure:	No data available
Carcinogenicity:	Not classifiable as to its carcinogenicity based on its IARC, ACGIH, NEP, or EPA classification
Additional information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known

#### 12 Ecotoxicological information

Toxicity:	
Toxicity to fish:	Fathead minnow LC <sub>50</sub> : 1,826 mg/L:96H
Toxicity to daphnia and other aquatic invertebrates:	No data available
Toxicity to algae:	No data available
Persistence and degradability:	
Biodegradability:	No data available
Bioaccumulative potential:	
Bioaccumulation:	No data available
Mobility in soil:	No data available
Other adverse effects:	No additional information available

#### 13 Disposal considerations

Recommendation:	Consult state, local or national regulation for proper disposal Allow professional disposal company to handle waste Must be specially treated under adherence to official regulations
Unclean packagings recommendation:	Disposal must be made according to official regulations

#### 14 Transport information

##### Land transport DOT

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Zinc sulfide

##### Air transport ICAO-TI and IATA-DGR:

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Zinc sulfide

##### UPS Ground / FedEx Ground

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Zinc sulfide

##### UPS Air

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Zinc sulfide

#### 15 Regulatory information

SARA Section 302 Extremely Hazardous components and corresponding TPQs:	Not subject
SARA Section 311 / 312 hazards:	Not subject
SARA Section 313 components:	This product contains chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-to-know Act of 1986 and 40CFR372
California Proposition 65 components:	Not subject
TSCA:	Material is listed on TSCA Inventory

#### 16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. LAB ALLEY LLC MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.