According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.28.2017

### Lead Sulfide,

# **SECTION 1: Identification**

# **Product identifier**

Product name: Lead Sulfide, Product code: S25384

# Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable. Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

### Manufacturer or supplier details

### Manufacturer: Supplier:

AquaPhoenix Scientific	Fisher Science Education
860 Gitts Run Road	6771 Silver Crest Road
Hanover	Nazareth
PA 17331	PA 18064
(717) 632-1291	800 955-1177

### Emergency telephone number: United States

Emergency Telephone No.: 800-255-3924

### SECTION 2: Hazard(s) identification

### **GHS classification:**

Acute toxicity (oral), category 4 Acute toxicity (inhalation), category 4 Reproductive toxicity, category 1A Specific target organ toxicity - repeated exposure, category 2 Acute aquatic hazard, category 1 Chronic aquatic hazard, category 1

### Label elements

#### Hazard pictograms:



## Signal word: Danger

#### Hazard statements:

H302 Harmful if swallowed

H332 Harmful if inhaled

H360 May damage fertility or the unborn child

H373 May cause damage to organs through prolonged or repeated exposure

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

# **Precautionary statements:**

P264 Wash skin thoroughly after handling

# According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# Initial preparation date: 12.28.2017

P270 Do not eat, drink or smoke when using this product

P271 Use only outdoors or in a well-ventilated area

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P281 Use personal protective equipment as required

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P273 Avoid release to the environment

P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P340+P312 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell

P308+P313 If exposed or concerned: Get medical advice/attention

P391 Collect spillage

P405 Store locked up

P501 Dispose of contents and container as instructed in Section 13

# Hazards not otherwise classified: None

# **SECTION 3: Composition/information on ingredients**

Identification	Name	Weight %
CAS number: 1314-87-0	Lead sulfide	100

## Additional Information: None

# **SECTION 4: First aid measures**

# Description of first aid measures

# **General notes:**

Not determined or not applicable.

# After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Get medical advice/attention if you feel unwell Move to fresh air Call a POISON CONTROL CENTER or seek medical attention if you feel unwell

# After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention

# After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention

# After swallowing:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

Call a POISON CONTROL CENTER or seek medical attention if you feel unwell Do not induce vomiting

Rinse mouth and then drink plenty of water

# Most important symptoms and effects, both acute and delayed Acute symptoms and effects:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.28.2017

### Lead Sulfide,

Not determined or not applicable.

### Delayed symptoms and effects:

Not determined or not applicable.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not applicable.

### Notes for the doctor:

Not determined or not applicable.

#### SECTION 5: Firefighting measures

### Extinguishing media

### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

#### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

### Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

### **Special precautions:**

Carbon monoxide and carbon dioxide may form upon combustion Heating causes a rise in pressure, risk of bursting and combustion

### **SECTION 6: Accidental release measures**

### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

### **Environmental precautions:**

Should not be released into the environment Prevent from reaching drains, sewer or waterway

## Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing Sweep or scoop up solid material while minimizing dust generation Dispose of contents / container in accordance with local regulations

### **Reference to other sections:**

Not determined or not applicable.

### **SECTION 7: Handling and storage**

#### Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing dust.

Do not eat, drink, smoke or use personal products when handling chemical substances.

### Conditions for safe storage, including any incompatibilities:

#### Keep container tightly sealed.

Keep container dry.

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Initial preparation date: 12.28.2017

## Lead Sulfide,

Store in a cool, well-ventilated area.

## **SECTION 8: Exposure controls/personal protection**

Only those substances with limit values have been included below.

## **Occupational Exposure limit values:**

No occupational exposure limits noted for the ingredient(s).

### **Biological limit values:**

No biological exposure limits noted for the ingredient(s).

# Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

## **Appropriate engineering controls:**

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

# Personal protection equipment

## Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

## Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

### **Respiratory protection:**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

# General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

# **SECTION 9: Physical and chemical properties**

### Information on basic physical and chemical properties

Appearance	Silver solid
Odor	Odorless
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	1113.9°C
Initial boiling point/range	1281.1°C
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	1 mmHg at 852°C

# According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.28.2017

# Lead Sulfide,

Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	7.5 g/cm³ at 25°C
Solubilities	Insoluble.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

## **Other information**

Molecular weight 239.26 g/mol
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# **SECTION 10: Stability and reactivity**

# Reactivity:

Does not react under normal conditions of use and storage.

# **Chemical stability:**

Stable under normal conditions of use and storage.

### Possibility of hazardous reactions:

None under normal conditions of use and storage.

### **Conditions to avoid:**

ncompatible materials. Dust generation. Combustible materials.

### Incompatible materials:

Strong oxidizing agents. Iodine monochloride. Hydrogen peroxide. Active metals. Sodium.

### Hazardous decomposition products:

Sulphur oxides. Lead oxides.

# **SECTION 11: Toxicological information**

### Acute toxicity

Assessment: Harmful if swallowed Harmful if inhaled

Product data: No data available.

## Substance data:

Name	Route	Result
Lead sulfide	oral	Harmful if swallowed.
	inhalation	Harmful if inhaled.

# Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

### Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.28.2017

## Lead Sulfide,

# **Respiratory or skin sensitization**

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

## Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# Reproductive toxicity

Assessment: May damage fertility or the unborn child

Product data: No data available.

# Substance data:

Name	Result
Lead sulfide	May damage the unborn child. Suspected of damaging fertility.

## Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

### Specific target organ toxicity (repeated exposure)

Assessment: May cause damage to organs through prolonged or repeated exposure

Product data: No data available.

# Substance data:

Name	Result
Lead sulfide	May cause damage to organs through prolonged or repeated exposure.

### Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available. Other information: No data available.

### **SECTION 12: Ecological information**

### Acute (short-term) toxicity

Assessment: Very toxic to aquatic life Product data: No data available. Substance data:

# According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.28.2017

# Lead Sulfide,

Name	Result
Lead sulfide	LC50 - Fish - 96 H - 0.915 mg/l - 4010 mg/l
	LC50 - Crustaceans - 48 H - 0.138 mg/l - 9960 mg/l

# Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

### Persistence and degradability

**Product data:** No data available. **Substance data:** No data available.

### **Bioaccumulative potential**

Product data: No data available. Substance data: No data available.

# Mobility in soil

Product data: No data available. Substance data: No data available.

Other adverse effects: No data available.

## SECTION 13: Disposal considerations

### **Disposal methods:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

### **SECTION 14: Transport information**

# United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s. (Lead Sulfide)
UN transport hazard class(es)	9
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

### International Maritime Dangerous Goods (IMDG)

UN number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s. (Lead Sulfide)
UN transport hazard class(es)	9
Packing group	
Environmental hazards	Marine Pollutant
Special precautions for user	None

# International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.28.2017

### Lead Sulfide,

UN number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s. (Lead Sulfide)
UN transport hazard class(es)	9
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

## **SECTION 15: Regulatory information**

### United States regulations

Inventory listing (TSCA):

1314-87-0	Lead sulfide
11314-07-0	ILeau Suillue

Listed

Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

## SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

### SARA Section 313 toxic chemicals:

	1314-87-0	Lead sulfide		Listed	
CERCLA:					
	1314-87-0	Lead sulfide	Listed	10 lbs.	

### **RCRA:** Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

### Massachusetts Right to Know:

	1314-87-0	Lead sulfide	Listed
New Jersey Right to Know:			
	1314-87-0	Lead sulfide	Listed
New York Right to Know:			
	1314-87-0	Lead sulfide	Listed
Demenderation Dialette Known			

Pennsylvania Right to Know:

	1314-87-0	Lead sulfide
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California Proposition 65: None of the ingredients are listed.

### **SECTION 16: Other information**

# Abbreviations and Acronyms: None

### **Disclaimer:**

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.28.2017

Lead Sulfide,

NFPA: 2-0-0 HMIS: 2-0-0-X Initial preparation date: 12.28.2017

End of Safety Data Sheet