

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name	:	Lead Concentrate, naturally occurring minerals
Product Code	:	No Code
Chemical Name	:	Galena
Formula	:	PbS
Uses Advised Against	:	Food, drug, pesticide, or biocidal product use

Details of the supplier of safety data sheet

Company

Ouray Silver Mines Inc.

1900 Main St. Unit 1

Ouray, CO 81427

Phone: (970) 325-9830

Email: info@ouraysilvermines.com

www.ouraysilvermines.com

2.0 HAZARDS IDENTIFICATION

Hazard Statements

May cause cancer.

May cause damage to unborn child. Suspected of damaging fertility.

May cause damage to organs through prolonged or repeated exposure.

Harmful if swallowed or if inhaled

Short term (acute) aquatic hazard

Long-term (chronic) aquatic hazard



Precautionary Statements

Prevention

Obtain special instructions before use

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

Use personal protective equipment, as required



Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Avoid release to the environment

Response

If exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not Applicable

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Galena (PbS)	1314-87-0	40 – 75%
Zinc sulfide (ZnS)	1314-98-3	5 – 10%
Quartz (SiO)	14808-60-7	5 – 10%
Chalcopyrite (CuFeS2)	1308-56-1	0.1 – 5%
Iron pyrite (FeS2)	1309-36-0	5 – 10%

4.0 FIRST AID MEASURE

General advice : Consult physician. Show this SDS to the doctor in attendance.
Move out of dangerous area.

Inhalation : Loosen the garments and supply fresh air. If not breathing, give artificial respiration

Ingestion : Induce vomiting and stomach wash by ingesting fresh water. Call a physician or poison control center

Skin : Wash with water & soap

Eyes : Wash with water

5.0 FIRE FIGHTING MEASURES

Suitable extinguishing media : Water

Extinguishing media not to be used: : Dry chemical powder and soda acid.

Special exposure hazards : Sulfur oxides, Lead oxides

Protective equipment for Fire Fighter : Gas mask and self-contained breathing apparatus



6.0 ACCIDENTAL RELEASE MEASURES

- Personal precautions:

Use dust mask, hand gloves, and goggles. Avoid breathing dust. Ensure adequate ventilation.
- Environmental:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided
- Methods for Cleaning up:

Sweep up material and place into a suitable container. Avoid generating dusty conditions

7.0 HANDLING AND STORAGE

- Handling

:

During handling use dust mask, hand gloves, and protective eyewear. contact with Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation.
- Storage

:

Keep container closed in a dry well-ventilated place.

8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Lead sulfide (PbS)	TWA: 0.05 mg/m ³	PEL: 0.05mg/m ³	IDLH: 100 mg/m ³ TWA: 0.050 mg/m ³	TWA: 0.05 mg/m ³
Zinc Sulfide (ZnS)	-	-	-	-

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

- Engineering Measures

Ensure adequate ventilation, especially in confined areas. Wash hands before breaks and at the end of workday.

Personal Protective Equipment

- Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.



Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Brown and silver color - fine material
Odor	:	Mild sulphuric smell
pH	:	Not Determined
Melting point/boiling range	:	1113.9 - 2037°C
Boiling point/melting range	:	Not Determined
Flash point	:	Not Applicable
Flammability	:	Not Applicable
Auto flammability	:	Not Applicable
Explosive properties	:	Not Applicable
Oxidizing properties	:	Mild oxidizing property
Relative pressure	:	Not Applicable
Relative density (Bulk)	:	Variable
Solubility	:	
Hydro solubility	:	Not soluble in water
Liposolubility	:	Not Applicable
(Solvent oil)	:	
Partition coefficient (octanol/water)	:	No Data
Available	:	
Other data	:	Not Available

10.0 STABILITY AND REACTIVITY

Material is	:	Stable under normal circumstances
Condition to Avoid	:	Keep away from fire
Material to avoid	:	Acids, Oxidizing agents, hydrogen peroxide, iodine monochloride
Hazardous decomposition products	:	Sulfur oxides, Lead oxides, Hydrogen sulfide, Zinc oxide

11.0 TOXICOLOGICAL INFORMATION

Lead Sulfide (PbS)

ACUTE TOXICITY:
No information available



CHRONICTOXICITY	:
IRRITAION/SENSITIZATION	: No information available
CARCINOGENICITY	: IARC Group 2A; NTP Reasonably Anticipated: ACGIH A3
MUTAGENIC EFFECTS	: No information available
REPRODUCTIVE EFFECTS	: Not Applicable
DEVELOPMENTAL EFFECTS	: Lead containing fumes may cause irritation and metal fume fever.
STOT – singe exposure	: None known
STOT – repeated exposure	: Central nervous system (CSN) Blood Kidney
ASPIRATION HAZARD	: IARC Group 2A; NTP Reasonably Anticipated: ACGIH
SYMPTOMS (acute & delayed)	: No information available
ENDOCRINE DISRUPTOR	: No information available
OTHER EFFECTS	: Toxicological properties have not been fully investigated

Zinc Sulfide (ZnS)

ACUTE TOXICITY

LD50 Oral - Rat - > 2,000 mg/kg

Inhalation: No data available

LD50 Dermal - Rat - > 2,000 mg/kg

No data available

CHRONICTOXICITY	:
IRRITAION/SENSITIZATION	: Zinc containing fumes may cause irritation and metal fume fever.
CARCINOGENICITY	: Not listed (ACGIH, IARC, NTP)
MUTAGENIC EFFECTS	: No information available
REPRODUCTIVE EFFECTS	: No information available
DEVELOPMENTAL EFFECTS	: No information available
STOT – singe exposure	: None known
STOT – repeated exposure	: None known
ASPIRATION HAZARD	: No information available
SYMPTOMS (acute & delayed)	: No information available
ENDOCRINE DISRUPTOR	: No information available
OTHER EFFECTS	: No information available

12.0 ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains substances that are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate groundwater system. Do not allow material to be released to the environment without proper government permits.

Persistence and Degradability: Insoluble in water. May persist. Not readily biodegradable.

Bioaccumulation/ Accumulation: No information available

Mobility: No information available



13. DISPOSAL CONSIDERATIONS

Product disposal: If material cannot be returned to process or salvage, dispose of only in accordance with applicable regulations

Container disposal: NA

14. TRANSPORT INFORMATION

Lead Sulfide (PbS)

DOT (US)

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Lead sulfide)

Reportable Quantity (RQ): 10 lbs

Poison Inhalation Hazard: No

IMDG

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Lead sulfide)

Marine pollutant: yes

IATA

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Lead sulfide)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packaging and combination packaging containing inner packaging with Dangerous Goods > 5L for liquids or > 5kg for solids.

Zinc Sulfide (ZnS)

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Precaution: Use dust mask, hand gloves and goggles

15. REGULATORY INFORMATION

CAS No:



Component	CAS-No
Lead sulfide (PbS)	1314-87-0
Zinc sulfide (ZnS)	1314-98-3

Component names: Galena, Sphalerite

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Lead sulfide

CAS-No. : 1314-98-3

Zinc sulfide

CAS-No.: 1314-98-3 (Listed under Zinc Compounds)

Copper Compounds

CAS-No.: 7440-50-8

SARA 311/312 Hazards

Lead sulfide

Acute Health Hazard, Chronic Health Hazard – see Section 2 for additional information

16. OTHER INFORMATION

Creation Date: 12/01/2021

Revision Date: 12/01/2021

Print Date: 12/01/2021

NOTE: Contains both Lead Sulfide and Zinc Sulfide minerals in addition to various levels of Silver Antimonide/Sulfide minerals, Iron Sulfide, and Copper Sulfide minerals. See CAS-No listed in sections 3.0 and 15 of this SDS for further reference to these specific material's SDS information. Concentrations of metal and silica bearing materials in this "concentrate" are not guaranteed and vary on a sample by sample basis. Consult metallurgical studies performed on sample before assuming metals' concentrations.

Disclaimer

The above information is intended to give general health and safety guidance on the storage and transport of the substance or product to which it relates. The requirement or recommendation of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product shall take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate.