

SAFETY DATA SHEET

Preparation Date: 7/28/21

Revision Date: Not Applicable

Revision Number: Not Applicable

1. IDENTIFICATION

Product identifier

Product code: C5259
Product Name: MERCURIC SULFIDE, RED POWDER, REAGENT

Other means of identification

Synonyms: Almaden
C.I. 77766
C.I. Pigment Red 106
Chinese vermilion
Cinnabar
Ethiops mineral
Mercuric Sulfide Red
Mercuric Sulfide, Black
Mercuric sulfide
Mercury monosulfide
Mercury sulphide
Mercury(2+) sulfide
Monomercury sulfide
Orange vermilion
Pigment Red 106
Red cinnabar
Red mercury sulphide
Scarlet vermilion
Vermilion
beta-Mercuric sulfide

CAS #: 1344-48-5
RTECS # OX0720000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: For manufacturing or laboratory use only.
Uses advised against Not for food or drug use.

Supplier: Lab Alley LLC
22111 Highway 71 West, Suite 601
Spicewood, Texas 78669
Tel.: 512-668-9918

Order Online At: <https://www.laballey.com/products/mercuric-sulfide-100g>
Emergency telephone number InfoTrac: 800-535-5053

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Skin sensitization	Category 1

Label elements

Danger

Hazard statements
Harmful if swallowed
May cause an allergic skin reaction



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Do not eat, drink or smoke when using this product
Wear protective gloves
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Mercuric Sulfide	1344-48-5	100

4. FIRST AID MEASURES

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First aid measures

General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms	May cause eye/skin irritation. May cause an allergic skin reaction. May cause sensitization by skin contact. May cause irritation of respiratory tract. Harmful if swallowed.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician:	Treat symptomatically.
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Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:	Dry chemical. Carbon dioxide (CO ₂). Water spray, mist, or foam.
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Unsuitable Extinguishing Media:	No information available.
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Specific hazards arising from the chemical

Hazardous Combustion Products:	Mercury oxides. Sulfur Oxides.
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Specific hazards:	May be combustible at high temperatures
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Special Protective Actions for Firefighters

Specific Methods:	No information available.
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Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing dust. Avoid dust formation. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Ensure adequate ventilation. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe dust. Do not ingest. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Sensitive to light. Store in light-resistant containers. Protect from light. Store in a segregated and approved area. Store away from incompatible materials. Store at controlled room temperature.

Incompatible Materials:

Strong oxidizing agents
Acids
Halogens
metal oxides

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Mercuric Sulfide	1344-48-5	None	None	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British	Canada - Ontario	Canada - Quebec
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			Columbia		
Mercuric Sulfide	1344-48-5	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Mercuric Sulfide	1344-48-5	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:

Goggles or Safety glasses with side-shields

Skin and body protection:

Gloves. Long sleeved clothing. Chemical resistant apron.

Respiratory protection:

Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Solid

Appearance:

Powder.

Color:

Red.

Odor:

Odorless.

Taste

No information available.

Formula:

HgS

Molecular/Formula weight:

232.65

Flammability:

No information available

Flashpoint (°C/°F):

No information available.

Flash Point Tested according to:

Not available

Autoignition Temperature (°C/°F):

No information available

Lower Explosion Limit (%):

No information available

Upper Explosion Limit (%):

No information available

Melting point/range(°C/°F):

583.5°C (1082.3°F)

Decomposition temperature(°C/°F):

No information available

Boiling point/range(°C/°F):

No information available

Bulk density:

1.07

Density (g/cm3):

8.1

Specific gravity:

No information available

pH:

No information available

Vapor pressure @ 20°C (kPa):

No information available

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Evaporation rate:
No information available

Vapor density:
No information available

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

**Partition coefficient
(n-octanol/water):**
No information available

Viscosity:
No information available

Miscibility:
No information available

Solubility:
Insoluble in water

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents

Chemical stability

Stability: Sensitive to light. Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Avoid dust formation. Exposure to light. Incompatible materials.

Incompatible Materials: Strong oxidizing agents
Acids
Halogens
metal oxides

Hazardous decomposition products: Mercury/mercury oxides. Sulfur oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Ingestion. Inhalation.

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document
Component Information

Mercuric Sulfide	
CAS-No.	1344-48-5

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =

Value - Acute Tox Oral = No information available

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation. May cause sensitization by skin contact. May cause allergic skin reaction.

Eye Contact: May cause eye irritation.

Inhalation May cause irritation of respiratory tract.

Ingestion Harmful if swallowed. May cause digestive (gastrointestinal) tract irritation.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available.

Sensitization: May cause sensitization by skin contact.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Mercuric Sulfide	1344-48-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

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Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Mercuric Sulfide	1344-48-5	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN2025
Proper Shipping Name: Mercury compounds, solid, n.o.s. (mercuric sulfide)
Hazard Class: 6.1
Subsidiary Class No information available
Packing group: II
Emergency Response Guide Number 151
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions IB8, IP2, IP4, T3, TP33
Symbol(s): No information available
Description: UN2025, Mercury compounds, solid, n.o.s. (Mercuric Sulfide), 6.1, II

TDG (Canada)	
UN-No:	UN2025
Proper Shipping Name:	Mercury compound, solid, n.o.s.
Hazard Class:	6.1
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant Description:	No Information available UN2025, Mercury compound, solid, n.o.s., 6.1, II
ADR	
UN-No:	UN2025
Proper Shipping Name:	Mercury compound, solid, n.o.s.
Hazard Class:	6.1
Packing Group:	II
Subsidiary Risk:	No information available
Special Provisions Description:	43, 274, 529, 585, 66 UN2025, Mercury compound, solid, n.o.s. (Mercuric Sulfide), 6.1, II
IMO / IMDG	
UN-No:	UN2025
Proper Shipping Name:	Mercury compounds, solid, n.o.s. (mercuric sulfide)
Hazard Class:	6.1
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant Description:	No information available
EMS:	F-A
Special Provisions Description:	274, 43, 66 UN2025, Mercury compound, solid, n.o.s. (Mercuric Sulfide), 6.1, II
RID	
UN-No:	UN2025
Proper Shipping Name:	Mercury compound, solid, n.o.s.
Hazard Class:	6.1
Subsidiary Risk:	No information available
Packing Group:	II
Special Provisions Description:	43, 274, 529, 585, 66 UN2025, Mercury compound, solid, n.o.s. (Mercuric Sulfide), 6.1, II
ICAO	
UN-No:	UN2025
Proper Shipping Name:	Mercury compound, solid, n.o.s.
Hazard Class:	6.1
Subsidiary Risk:	No information available
Packing Group:	II
Description:	UN2025, Mercury compound, solid, n.o.s. (Mercuric Sulfide), 6.1, II
Special Provisions	A3, A5, A6, A18
IATA	
UN-No:	UN2025
Proper Shipping Name:	Mercury compound, solid, n.o.s.
Hazard Class:	6.1
Subsidiary Risk:	No information available
Packing Group:	II
ERG Code:	6L
Special Provisions Description:	No information available UN2025, Mercury compound, solid, n.o.s. (Mercuric Sulfide), 6.1, II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Mercuric Sulfide	1344-48-5	Present	Present KE-23133	Present	Present (1)-438	Present	Present	Present 215-696-3

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Mercuric Sulfide	1344-48-5	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Mercuric Sulfide	1344-48-5	None	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) - Health and Safety Reporting
Mercuric Sulfide	1344-48-5	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

D1B Toxic materials

D2B Toxic materials

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Mercuric Sulfide	1344-48-5	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Mercuric Sulfide	1344-48-5	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Mercuric Sulfide	1344-48-5	Not listed

EU Classification**R-phrase(s)**

R22 - Harmful if swallowed.

R43 - May cause sensitization by skin contact.

S -phrase(s)

S24 - Avoid contact with skin.

S37 - Wear suitable gloves.

S46 - If swallowed, seek medical advice immediately and show this container or label.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Mercuric Sulfide	1344-48-5		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC**Indication of danger:**

Xn - Harmful.

Xn

**16. OTHER INFORMATION**

Preparation Date: 7/28/21
Revision Date: Not Applicable
Prepared by: Lab Alley

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Lab Alley LLC assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet