



# SAFETY DATA SHEET

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## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Cadmium Sulfide**  
PRODUCT NUMBER: 1366  
CAS NUMBER: 1306-23-6  
SYNONYMS: Cadmium monosulfide, Cadmium yellow  
MANUFACTURER:

ProChem, Inc.  
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## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

**Danger**

### Hazard Statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H341	Suspected to cause genetic defects.
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.

### Precautionary Phrases

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash face, hands, and any exposed skin thoroughly after handling.
P270	Do not eat, drink, or smoke, when using this product.
P280	Wear protective gloves/protective clothing/face protection/eye protection.
P281	Use personal protective equipment as required.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P308 + P313	If exposed: call a POISON CENTER or doctor/physician.

## SECTION 2 HAZARDS IDENTIFICATION (Cont.)

### HMIS CLASSIFICATION:

Health: 2      Chronic: \*      Fire: 0      Reactivity Hazard: 0

### NFPA RATING:

Health: 3      Flammability: 0      Reactivity Hazard: 0

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: CdS

Molecular Weight: 144.48

CHEMICAL NAME	CAS#	%
Cadmium Sulfide	1306-23-6	100

## SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with plenty of water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove to fresh air and keep at rest. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases, seek immediate medical assistance.

**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

## SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** Not applicable

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Product does not present explosion hazards.

**EXTINGUISHING MEDIUM:** Carbon oxide and dry powder Use agent most appropriate for surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Hydrogen sulfide and sulfur dioxide Cadmium oxides.

**UNUSUAL FIRE OR EXPLOSION HAZARD:** Contact with acids gives off hydrogen sulfide, a toxic and flammable gas.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spillage from entering drains or allowing to be released into the environment.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Spill should be covered with dry sodium carbonate or dolomite to reduce formation of dust. Sweep up and place in suitable container for proper disposal.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Ensure adequate ventilation. Avoid contact with skin and eyes.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area. Store away from oxidizing agents.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

### EXPOSURE CONTROLS:

Component	Exposure Limits	Basis	Entity
Cadmium Sulfide	0.005 mg/m <sup>3</sup>	PEL	OSHA
	0.002 mg/m <sup>3</sup>	TWA	ACGIH
	0.01 mg/m <sup>3</sup>	TWA	ACGIH

PEL: Permissible Exposure Limit

**EYE PROTECTION:** Wear chemical safety glasses or goggles and face shield.

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.

**VENTILATION:** Provide local exhaust, preferably mechanical.

**RESPIRATOR:** Use an approved respirator.

**ADDITIONAL PROTECTION:** Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** Yellow to Orange solid

**ODOR:** None

**MOLECULAR WEIGHT:** 144.48

**BOILING POINT:** No data available

**MELTING POINT:** No data available

**SPECIFIC GRAVITY:** 4.82

**VAPOR DENSITY:** No data available

**SOLUBILITY IN WATER:** Insoluble

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** Contact of dust cloud with an ignition source

**INCOMPATIBILITY:** Active metals, acids, and oxidizing agents

**DECOMPOSITION PRODUCTS:** Sulfur oxides, hydrogen sulfide, and cadmium oxide

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** LD50 Oral – rat – 7080 mg/kg

**CARCINOGENIC EFFECTS:** Carcinogen to humans

**MUTAGENIC EFFECTS:** Not available

**TETRAOGENIC EFFECTS:** Not available

**CHRONIC TOXICITY:** Not available

**RTECS:** EV3150000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

## SECTION 12 ECOLOGICAL DATA

**TOXICITY TO FISH:** Static test LC50 - Pimephales promelas (fathead minnow) - 0.108 mg/l - 96 h

**TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES:** Static test LC50 - Daphnia magna (Water flea) - 0.0011 mg/l - 48 h

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

## SECTION 14 TRANSPORTATION DATA

**DOT:** UN2570

Cadmium compounds  
(Cadmium Sulfide)

CLASS 6.1

PG III

Marine Pollutant: No

**IATA:** UN2570

Cadmium compound  
(Cadmium Sulfide)

CLASS 6.1

PG III

## SECTION 15 REGULATORY INFORMATION

**TSCA:** Listed

**SARA 302/304:** Not Listed

**SARA 311/312:** Not Listed

**SARA (TITLE 313):** Cadmium Sulfide

**CALIFORNIA PROP. 65:** Cadmium Sulfide

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS:** Cadmium Sulfide

**NEW JERSEY RIGHT TO KNOW COMPONENTS:** Cadmium Sulfide

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS:** Cadmium Sulfide

**ILLINOIS RIGHT TO KNOW COMPONENTS:** Cadmium Sulfide

## SECTION 16 OTHER INFORMATION

**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, ProChem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

**DATE REVISED:** 02/22

**SDS DEPT.**