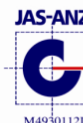




**INDENTA™**  
**Chemicals (India) Pvt. Ltd.**  
**(ISO 9001:2008 Certified Company)**



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## Material Safety Data Sheet Cadmium Sulfide

### SECTION 1.1 – PRODUCT IDENTIFICATION

Product name : Cadmium Sulfide  
Molecular formula : CdS  
Molecular weight : 144.46  
CAS no. : 1306-23-6

### SECTION: 1.2 – COMPANY IDENTIFICATION

**Company Name: Indenta Chemicals (India) Pvt. Ltd.**

**Address:** 201, Adamji Building, 413, Narshi Natha Street, Mumbai -400 009. (India)

**Telephone #:** +91-22-23449820 / 23411655

**Fax #:** +91-22-23432060

### SECTION 2: HAZARD IDENTIFICATION

#### Classification

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

Acute oral toxicity	Category 4
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 2
Specific target organ toxicity - (repeated exposure)	Category 1

#### Label Elements

##### Signal Word

Danger

##### Hazard Statements

Harmful if swallowed

Suspected of causing genetic defects

May cause cancer

Suspected of damaging fertility. Suspected of damaging the unborn child

Causes damage to organs through prolonged or repeated exposure

**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

**Response**

IF exposed or concerned: Get medical attention/advice

**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)**

May cause long lasting harmful effects to aquatic life

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
Cadmium sulfide	1306-23-6	99

**SECTION 4: FIRST AID MEASURES**

**Eye Contact:** Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Skin Contact:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

**Inhalation:** Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

**Ingestion:** Call a physician immediately. Clean mouth with water.

**Most important symptoms/effects:** No information available

**Notes to Physician:** Treat symptomatically

**SECTION 5: FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Substance is nonflammable; use agent most appropriate to extinguish surrounding fire

**Unsuitable Extinguishing Media:** No information available

**Flash Point** -No information available

**Method** - No information available

**Autoignition Temperature** No information available

**Explosion Limits**

**Upper** No data available

**Lower** No data available

**Sensitivity to Mechanical Impact:** No information available

**Sensitivity to Static Discharge:** No information available

**Specific Hazards Arising from the Chemical:** Keep product and empty container away from heat and sources of ignition

**Hazardous Combustion Products:** Sulfur oxides Sulfides

**Protective Equipment and Precautions for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors

**NFPA:** Health 3 Flammability 0 Instability 0 Physical Hazards N/A

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Ensure adequate ventilation. Use personal protective equipment.

**Environmental Precautions:** See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up:** Sweep up or vacuum up spillage and collect in suitable container for disposal.

## SECTION 7: HANDLING AND STORAGE

**Handling:** Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation.

**Storage:** Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

## SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Cadmium sulfide	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.002 mg/m <sup>3</sup>		IDLH: 9 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Cadmium sulfide	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.002 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.002 mg/m <sup>3</sup>

**Engineering Measures:** Ensure adequate ventilation, especially in confined areas.

### 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

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Powder Solid
Appearance	Yellow-Orange
Odor	Odorless
Odor Threshold	No information available

pH	No information available
Melting Point / Range	> 999 °C / 1830.2 °F
Boiling Point / Range	No information available
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Relative Density	4.820
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available
Molecular Formula	Cd S
Molecular Weight	144.46

## SECTION 10: STABILITY AND REACTIVITY

**Reactive Hazard:** None known, based on information available

**Stability:** Stable under normal conditions.

**Conditions to Avoid:** Incompatible products

**Incompatible Materials:** Acids

**Hazardous Decomposition Products:** Sulfur oxides, Sulfides

**Hazardous Polymerization:** Hazardous polymerization does not occur.

**Hazardous Reactions:** None under normal processing

## Section 11: TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Product Information

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cadmium sulfide	7080 mg/kg ( Rat )	Not listed	Not listed

**Toxicologically Synergistic Products:** No information available

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

**Irritation:** No information available

**Sensitization:** No information available

**Carcinogenicity:** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Cadmium sulfide	1306-23-6	Not listed	Not listed	A2	X	Not listed

**Mutagenic Effects:** Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment

**Reproductive Effects:** No information available.

**Developmental Effects:** No information available.

**Teratogenicity:** Teratogenic effects have occurred in experimental animals.

**STOT - single exposure:** None known

**STOT - repeated exposure:** None known

**Aspiration hazard:** No information available

**Symptoms / effects, both acute and delayed:** No information available

**Endocrine Disruptor Information:** No information available

**Other Adverse Effects:** See actual entry in RTECS for complete information

## Section 12: ECOLOGICAL INFORMATION

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**Ecotoxicity:** Do not empty into drains.

**Persistence and Degradability:** No information available.

**Bioaccumulation/ Accumulation:** No information available.

**Mobility:** No information available

## Section 13: DISPOSAL CONSIDERATION

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**Waste Disposal Methods:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## Section 14: TRANSPORT INFORMATION

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### **DOT**

**UN-No** UN2570

**Hazard Class** 6.1

**Packing Group** III

### **TDG**

**UN-No** UN2570

**Hazard Class** 6.1

**Packing Group** III

### **IATA**

**UN-No** 2570

**Proper Shipping Name** CADMIUM COMPOUND

**Hazard Class** 6.1

**Packing Group** III

### **IMDG/IMO**

**UN-No** 2570

**Proper Shipping Name** CADMIUM COMPOUND

**Hazard Class** 6.1

**Packing Group** III

**15: OTHER REGULATORY INFORMATION****International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Cadmium sulfide	X	X	-	215-147-8	-		X	X	X	X	X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations****TSCA 12(b):** Not applicable**SARA 313:**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Cadmium sulfide	1306-23-6	99	0.1

**SARA 311/312 Hazardous Categorization****Acute Health Hazard** No**Chronic Health Hazard** Yes**Fire Hazard** No**Sudden Release of Pressure Hazard** No**Reactive Hazard** No**Clean Water Act**

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Cadmium sulfide	-	-	X	-

**Clean Air Act**

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Cadmium sulfide	X		-

**OSHA Occupational Safety and Health Administration**

Not applicable

**CERCLA**

Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Cadmium sulfide	1306-23-6	Carcinogen	-	Carcinogen

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Cadmium sulfide	X	X	X	X	-

**U.S. Department of Transportation**

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations****Mexico – Grade:** No information available**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

**WHMIS Hazard Class:** D1B Toxic materials

D2A Very toxic materials

**SECTION 16: ADDITIONAL INFORMATION**

This information is provided for documentation purposes only.

The information contained in this Certificate of Analysis and Material Safety Data Sheet is obtained from current and reliable sources. The information contained herein is true and to the best of Indenta Chemicals (India) Pvt. Ltd. knowledge. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any Laws or Regulation. Final determination of the suitability of the material is the sole responsibility of the user. Customers should purchase products from Indenta Chemicals (India) Pvt. Ltd. with the clear understanding that all products must be used at the customers own discretion and only after referencing Material Safety Data Sheets (MSDS) and all other relevant technical information specific to the product. Indenta Chemicals (India) Pvt. Ltd. shall not be held responsible for any damages to property or for any adverse physical effects (including injury or bodily harm) caused by insufficient knowledge or the improper use of a product. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As with any manufacturing process, Indenta Chemicals (India) Pvt. Ltd. strongly recommends small lab scale testing for evaluation purposes prior to full commercial manufacturing. The information on the Indenta Chemicals (India) Pvt. Ltd. website is obtained from current and reliable sources but makes no representation as to its comprehensiveness or accuracy. Nothing contained herein should be considered as a recommendation by Indenta Chemicals (India) Pvt. Ltd. as to the fitness for any use. As the ordinary or otherwise use(s) of this product is outside the control of Indenta Chemicals (India) Pvt. Ltd., no representation or warranty, expressed or implied is made as to the effect(s) of such use(s) (including damage or injury), or the results obtained. The liability of Indenta Chemicals (India) Pvt. Ltd. is limited to the value of the

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