

# **MATERIAL SAFETY DATA SHEET (SDS/MSDS)**

## **CADMIUM OXIDE 99.5% EXTRA PURE**

CAS-No.: 1306-19-0

Product Code : 00608

Molecular Formula: CdO

## MATERIAL SAFETY DATA SHEET (SDS/MSDS)

### CADMIUM OXIDE 99.5% EXTRA PURE

CAS-No.: 1306-19-0

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Product form	:	Substance
Trade name	:	Cadmium Oxide 99.5% Extra Pure
EC-No.	:	215-146-2
CAS No	:	1306-19-0

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

###### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial For professional use only

###### 1.2.2. Uses advised against

No additional information available

##### 1.3. Details of the supplier of the safety data sheet

Company : Chemnovo Synthesis Pvt Ltd.  
N-226 Near Kumbhavali Naka  
Tarapur MIDC, Boisar-401 506  
Palghar, Maharashtra  
Telephone : +91 7400096089  
Email: export@chemnovo.in

##### 1.4. Emergency telephone number

Emergency number : + 91 7400096089 (9:00am - 6:00 pm)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (inhal.), Category 2	H330
Germ cell mutagenicity, Category 2	H341
Carcinogenicity, Category 1A	H350
Reproductive toxicity, Category 2	H361fd
Specific target organ toxicity – Repeated exposure, Category 1	H372
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Full text of H statements : see section 16

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Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.1; R45

Muta.Cat.3; R68

Repr.Cat.3; R62

Repr.Cat.3; R63

T+; R26

T; R48/23/25

N; R50/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS08

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H330 - Fatal if inhaled.

H341 - Suspected of causing genetic defects.

H350 - May cause cancer.

H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child.

H372 - Causes damage to organs through prolonged or repeated exposure.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P201 - Obtain special instructions before use.

P260 - Do not breathe vapours, dust, fume, gas.

P273 - Avoid release to the environment.

P281 - Use personal protective equipment as required.

P284 - Wear respiratory protection.

P310 - Immediately call a POISON CENTER/doctor

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## SECTION 3: Composition/information on ingredients

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CAS-No.: 1306-19-0

### 3.1. Substance

Name	:	Cadmium Oxide 99.5% Extra Pure
CAS No	:	1306-19-0
EC-No.	:	215-146-2

Full text of R- and H-statements: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	:	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	:	Gently wash with plenty of soap and water.
First-aid measures after eye contact	:	Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
First-aid measures after ingestion	:	Rinse mouth. Do not induce vomiting.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	:	Suspected of damaging fertility. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure.
Symptoms/effects after inhalation	:	Fatal if inhaled.
Chronic symptoms	:	May cause cancer.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	:	Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	:	Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

No additional information available

### 5.3. Advice for firefighter

Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection.
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures	:	Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment	:	Use personal protective equipment as required.
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Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Very toxic to aquatic life with long lasting effects.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe vapours.  
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep container tightly closed. Protect from moisture.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Hand protection : Protective gloves  
Eye protection : Chemical goggles or safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid  
Molecular mass : 128.41 g/mol  
Colour : Dark brown.  
Odour : odourless.  
Odour threshold : No data available  
pH : No data available  
Relative evaporation rate (butylacetate=1) : No data available

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### CADMIUM OXIDE 99.5% EXTRA PURE

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Melting point	:	950 °C
Freezing point	:	No data available
Boiling point	:	1559 °C
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	8.15 g/cm <sup>3</sup>
Solubility	:	Water: Insoluble in water
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Direct sunlight. Moisture.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

No additional information available

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity	:	Inhalation: Fatal if inhaled.
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified

## MATERIAL SAFETY DATA SHEET (SDS/MSDS)

### CADMIUM OXIDE 99.5% EXTRA PURE

CAS-No.: 1306-19-0

Germ cell mutagenicity	:	Suspected of causing genetic defects.
Carcinogenicity	:	May cause cancer.
Reproductive toxicity	:	Suspected of damaging fertility. Suspected of damaging the unborn child.
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	:	Not classified

#### SECTION 12: Ecological information

##### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

##### 12.2. Persistence and degradability

CADMIUM OXIDE 99.5% EXTRA PURE (1306-19-0)	
Persistence and degradability	May cause long-term adverse effects in the environment.

##### 12.3. Bioaccumulative potential

No additional information available

##### 12.4. Mobility in soil

No additional information available

##### 12.5. Results of PBT and vPvB assessment

CADMIUM OXIDE 99.5% EXTRA PURE (1306-19-0)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

##### 12.6. Other adverse effects

No additional information available

#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / AND

##### 14.1. UN number

UN-No. (ADR)	:	2570
UN-No. (IMDG)	:	2570
UN-No.(IATA)	:	2570
UN-No.(AND)	:	2570
UN-No. (RID)	:	2570

## MATERIAL SAFETY DATA SHEET (SDS/MSDS)

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CAS-No.: 1306-19-0

#### 14.2. UN proper shipping name

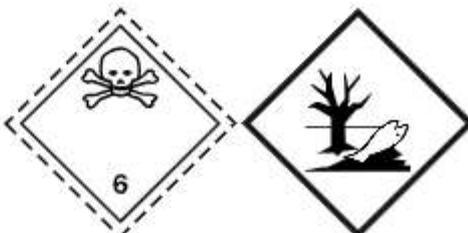
Proper Shipping Name (ADR)	:	CADMIUM COMPOUND
Proper Shipping Name (IMDG)	:	CADMIUM COMPOUND
Proper Shipping Name (IATA)	:	CADMIUM COMPOUND
Proper Shipping Name (ADN)	:	CADMIUM COMPOUND
Proper Shipping Name (RID)	:	CADMIUM COMPOUND
Transport document description (ADR)	:	UN 2570 CADMIUM COMPOUND, 6.1, III, (E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG)	:	UN 2570 CADMIUM COMPOUND, 6.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA)	:	UN 2570 CADMIUM COMPOUND, 6.1, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN)	:	UN 2570 CADMIUM COMPOUND, 6.1, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	:	UN 2570 CADMIUM COMPOUND, 6.1, III, ENVIRONMENTALLY HAZARDOUS

#### 14.3. Transport hazard class(es)

ADR	:	
Transport hazard class(es) (ADR)	:	6.1
Danger labels (ADR)	:	6.1
	:	



IMDG	:	
Transport hazard class(es) (IMDG)	:	6.1
Danger labels (IMDG)	:	6.1
	:	



IATA

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CAS-No.: 1306-19-0

Transport hazard class(es) (IATA) : 6.1

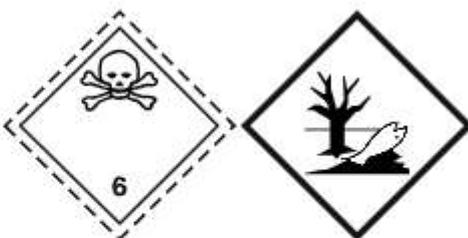
Hazard labels (IATA) : 6.1



AND

Transport hazard class(es) (ADN) : 6.1

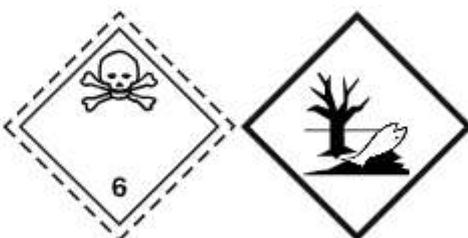
Danger labels (ADN) : 6.1



RID

Transport hazard class(es) (RID) : 6.1

Danger labels (RID) : 6.1



### 14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

### 14.5. Environmental hazards

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Dangerous for the environment	:	Yes
Marine pollutant	:	Yes
Other information	:	No supplementary information available

**14.6. Special precautions for user**

- Overland transport

Classification code (ADR)	:	T5
Special provision (ADR)	:	274, 596
Limited quantities (ADR)	:	5kg
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P002, IBC08, LP02, R001
Special packing provisions (ADR)	:	B3
Mixed packing provisions (ADR)	:	Mp10
Portable tank and bulk container instructions (ADR)	:	T1
Portable tank and bulk container special provisions (ADR)	:	Tp33
Tank code (ADR)	:	SGAH, L4BH
Tank special provisions (ADR)	:	TU15, Te19
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Special provisions for carriage - Bulk (ADR)	:	VC1, VC2, Ap7
Special provisions for carriage - Loading, unloading and handling (ADR)	:	CV13, Cv28
Special provisions for carriage - Operation (ADR)	:	S9
Hazard identification number (Kemler No.)	:	60
Orange plates	:	

**60****2570**

Tunnel restriction code (ADR)	:	E
EAC code	:	2X
- Transport by sea		
Special provision (IMDG)	:	223, 274
Packing instructions (IMDG)	:	P002, Lp02
IBC packing instructions (IMDG)	:	IBC08
IBC special provisions (IMDG)	:	B3
Tank instructions (IMDG)	:	T1
Tank special provisions (IMDG)	:	Tp33
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-A

**MATERIAL SAFETY DATA SHEET (SDS/MSDS)****CADMIUM OXIDE 99.5% EXTRA PURE****CAS-No.: 1306-19-0**

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Stowage category (IMDG)	:	A
Properties and observations (IMDG)	:	Powder or crystals with various colours. May be soluble or insoluble in water. Toxic if swallowed, by skin contact or by dust inhalation.
MFAG-No	:	154
- Air transport		
PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y645
PCA limited quantity max net quantity (IATA)	:	10kg
PCA packing instructions (IATA)	:	670
PCA max net quantity (IATA)	:	100kg
CAO packing instructions (IATA)	:	677
CAO max net quantity (IATA)	:	200kg
Special provision (IATA)	:	A3, A5
ERG code (IATA)	:	6L
- Inland waterway transport		
Classification code (ADN)	:	T5
Special provisions (ADN)	:	274, 596, 802
Limited quantities (ADN)	:	5 kg
Excepted quantities (ADN)	:	E1
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0
- Rail transport		
Classification code (RID)	:	T5
Special provision (RID)	:	274, 596
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P002, IBC08, LP02, R001
Special packing provisions (RID)	:	B3
Mixed packing provisions (RID)	:	Mp10
Portable tank and bulk container instructions (RID)	:	T1
Portable tank and bulk container special provisions (RID)	:	Tp33
Tank codes for RID tanks (RID)	:	SGAH, L4BH
Special provisions for RID tanks (RID)	:	Tu15
Transport category (RID)	:	2
Special provisions for carriage – Bulk (RID)	:	VC1, VC2, Ap7
Special provisions for carriage – Loading and unloading (RID)	:	CW13, CW28, Cw31
Colis express (express parcels) (RID)	:	Ce11
Hazard identification number (RID)	:	60

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

No REACH Annex XVII restrictions

Cadmium oxide is on the REACH Candidate List

Cadmium Oxide 99.5% Extra Pure is not on the REACH Annex XIV List

**15.1.2. National regulations****Germany**

Reference to AwSV : Water hazard class (WGK) 3, severe hazard to water (Classification according to AwSV; ID No. 8660)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**Netherlands**

SZW-lijst van kankerverwekkende stoffen Cadmium Oxide 99.5% Extra Pure is listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen –

Vruchtbaarheid

NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen – Ontwikkeling

**Denmark**

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

**15.2. Chemical safety assessment**

No additional information available

**SECTION 16: Other information**

Full text of R-, H- and EUH-statements:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Carc. 1A	Carcinogenicity, Category 1A

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Muta. 2	Germ cell mutagenicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
H330	Fatal if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
R26	Very toxic by inhalation
R45	May cause cancer
R48/23/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R68	Possible risk of irreversible effects
N	Dangerous for the environment
T	Toxic
T+	Very toxic

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Chemnovo Synthesis Pvt Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.chemnovo.in](http://www.chemnovo.in) for additional terms and conditions of sale.

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