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# 1. Identification of the substance/mixture and of the company/undertaking

# 1.1. Product identifier

Trade name: CADMIUM OXIDE

**Product code**: 13146

**Identification of the product**: Cadmium Oxide

CAS No: 1306-19-0

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

**Use**: Industrial. For professional use only.

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

**Company identification**: MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA) Tel:

+91 22 4066 8111, 2205 7772 . Fax: +91 22 2203 4442.

Email: info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,

Kulgaon, Badlapur (E), Dist.-Thane-421 503.

# 1.4. Emergency telephone number

Emergency number: +91 22 4066 8111 (10:00am - 6:00 pm)

# 2. Hazards identification

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

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

Acute toxicity (inhal.), H330

Category 2

Germ cell mutagenicity, H341

Category 2

Carcinogenicity, H350

Category 1A

Reproductive toxicity, H361fd

Category 2

Specific target organ

toxicity — Repeated exposure, H372

Category 1

Hazardous to the aquatic

environment — Chronic Hazard, H410

Category 1

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

# Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display

**Symbol(s)**: T : Very toxic

C: Corrosive





**R Phrase(s)**: 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 effect in the aquatic environment.

R68: Possible risk of irreversible effects.

R62:Possible risk of impaired fertility.

R63: Possible risk of harm to the unborn child.

R45:May cause cancer.

**S Phrase(s)**: S60: This material and its container must be disposed of as hazardous waste.

S61: avoid release to the environment . refer to special instruction/safety data sheets.

S53: Avoid exposure – obtain special instruction before use.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

# **Hazard pictograms**:







Signal word : Danger

**Hazard statements**: 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**: 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

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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

# 3. Composition/information on ingredients

**3.1. Substances**: CADMIUM OXIDE

CAS-No.: 1306-19-0

Substance.

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

# **<u>4</u>.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: May damage fertility. Suspected of damaging the unborn child.

Causes damage to organs through prolonged or repeated exposure.

Symptoms/effects after inhalation: Fatal if inhaled.

Symptoms/effects after ingestion: Harmful if swallowed.

Chronic symptoms: May cause cancer.

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

Treat symptomatically.

# 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 firefighters

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

#### 6. Accidental release measures

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# 6.1. Personal precautions, protective equipment and emergency procedures

# **6.1.1.** For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

# **6.1.2.** For emergency responders

Protective equipment: Use personal protective equipment as required.

Emergency procedures: Ventilate area.

#### **6.2.** Environmental precautions

Avoid release to the environment.

# 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

#### 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.

# 7.3. Specific end use(s)

No additional information available

#### 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

# 9. Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

**Odour threshold**: No data available

**pH**: No data available

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Relative evaporation rate (butylacetate=1): No data available

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

### 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

Air contact. Direct sunlight. Moisture.

### 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

No additional information available

#### 11. Toxicological information

# 11.1. Information on toxicological effects

Acute toxicity: Inhalation: Fatal if inhaled.

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Skin corrosion/irritation: Not classified

Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified

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

### 12. Ecological information

#### 12.1. Toxicity

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

# 12.2. Persistence and degradability

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

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

#### 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.

#### 14. Transport information

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

#### 14.1. UN number

UN-No. (ADR): 2570

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UN-No. (IMDG): 2570 UN-No. (IATA): 2570 UN-No. (ADN): 2570 UN-No. (RID): 2570

#### 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**- Transport hazard class(es) (IATA): 6.1

Hazard labels (IATA): 6.1

**ADN**- 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

Dangerous for the environment: Yes

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Marine pollutant : Yes

Other information: No supplementary information available

14.6. Special precautions for user

**Overland transport-** Classification code (ADR): T5

Special provisions (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:

Tunnel restriction code (ADR): E

EAC code: 2X

**Transport by sea-** Special provisions (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 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

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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 provisions (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 provisions (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,

unloading and handling (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

#### 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

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CADMIUM OXIDE AR 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. BlmSchV (Hazardous Incident Ordinance)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen: CADMIUM OXIDE AR is listed

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

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen –

Vruchtbaarheid: The substance is not listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen – Ontwikkeling: The substance is not listed

# **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

#### 16. Other information

**Abbreviations and acronyms**: PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

**Sources of key data used**: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

**Further information**: None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008 DISCLAIMER OF LIABILITY The information in this SDS was

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**Prepared by: MOLYCHEM (INDIA)** 

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