



Preparing for the New Era of Laboratories

# MATERIAL SAFETY DATA SHEET (MSDS)

According to regulation (EU) no.1907/2006

## **CADMIUM ACETATE DIHYDRATE 99% AR**

PRODUCT CODE : O-5053

CAS No : 5743-04-4

FORMULA :  $(\text{CH}_3\text{COO})_2\text{Cd} \cdot 2 \text{H}_2\text{O}$

UN No : 2570

# MATERIAL SAFETY DATA SHEET (SDS/MSDS)

## CADMIUM ACETATE DIHYDRATE 99% AR



MSDS Number : 0051

Date : Aug 19<sup>th</sup>, 2024

Version : 1.0

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

- 1.1 Product Name** : CADMIUM ACETATE DIHYDRATE 99% AR  
**Synonyms** : Acetic acid, cadmium salt, dihydrate  
**CAS No.** : 5743-04-4  
**HS Code** : 2915 29 90  
**Chemical Formula** :  $(\text{CH}_3\text{COO})_2\text{Cd} \cdot 2 \text{H}_2\text{O}$   
**Molecular Weight** : 266.52 g/mol  
**Product Code** : O-5053  
**Brand** : Labotiq  
**1.2 Manufacturer** : Labotiq  
**Address** : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111  
**Website** : [www.labotiq.net](http://www.labotiq.net)  
**Email** : [labotiq.id@gmail.com](mailto:labotiq.id@gmail.com)  
**For information** : Phone : (+62-251) 839110, 8311662, Fax : (+62-251) 83135710  
**Emergency number** : +6281316894650  
**1.3 Application** : Laboratory chemicals, Manufacture of substances, General Chemical reagent

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Acute toxicity, Oral (Category 4), H302  
 Acute toxicity, Inhalation (Category 4), H332  
 Acute toxicity, Dermal (Category 4), H312  
 Carcinogenicity (Category 1B), H350  
 Acute aquatic toxicity (Category 1), H400  
 Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word  
statement(s)

H302 + H312 + H332  
H350  
H410

Danger

Harmful if swallowed, in contact with skin or if inhaled  
May cause cancer.  
Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201  
P261  
P273  
P280  
P308 + P313  
P501

Obtain special instructions before use.  
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
Avoid release to the environment.  
Wear protective gloves/ protective clothing.  
IF exposed or concerned: Get medical advice/ attention.  
Dispose of contents/ container to an approved waste disposal plant.

# MATERIAL SAFETY DATA SHEET (SDS/MSDS)

## CADMIUM ACETATE DIHYDRATE 99% AR



MSDS Number : 0051

Date : Aug 19<sup>th</sup>, 2024

Version : 1.0

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Acetic acid, cadmium salt, dihydrate  
 Formula :  $(\text{CH}_3\text{COO})_2\text{Cd} \cdot 2 \text{H}_2\text{O}$   
 Molecular weight : 266.52 g/mol  
 CAS-No. : 5743-04-4  
 EC-No. : 208-853-2  
 Index-No. : 048-001-00-5

### 3.2 Mixture

Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component  | Classification  | Concentration |
|--|---|---------------|
| Cadmium acetate dihydrate<br>CAS-No. 5743-04-4<br>EC-No. 208-853-2<br>Index-No. 048-001-00-5 | Acute poison. 2; Acute poison. 4;<br>Muta. 1B; Carc. 1B; STOT RE 1;<br>Aquatic Aquatic 1; Aquatic Chronic 1;<br>H332, H312, H340, H350, H372,<br>H400, H410 M-Factor - Aquatic<br>Aquatic: 10 | <=100 %       |

For the full text of the H-Statements mentioned in this Section, see Section 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Consult a physician.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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

## **CADMIUM ACETATE DIHYDRATE 99% AR**



MSDS Number : 0051

Date : Aug 19<sup>th</sup>, 2024

Version : 1.0

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

#### **Unsuitable extinguishing media**

For this substance/mixture no limitations of extinguishing agents are given.

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

Carbon oxides, Cadmium/cadmium oxides, Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

### **5.3 Advice for firefighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### **5.4 Further information**

Prevent fire extinguishing water from contaminating surface water or the ground water system

## **SECTION 6: Accidental release measures**

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

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### **6.2 Environmental precautions**

Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### **6.4 Reference to other sections**

For disposal see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

#### **Advice on safe handling**

Work under hood. Do not inhale substance/mixture

**MATERIAL SAFETY DATA SHEET (SDS/MSDS)**  
**CADMIUM ACETATE DIHYDRATE 99% AR**

MSDS Number : 0051

Date : Aug 19<sup>th</sup>, 2024

Version : 1.0

**Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities****Storage conditions**

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

**Storage class**

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

Ingredients with workplace control parameters

**8.2 Exposure controls****Appropriat engineering controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment****Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Full contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740, Size M)

**Splash contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740, Size M)

**Body Protection**

protective clothing

# MATERIAL SAFETY DATA SHEET (SDS/MSDS)

## CADMIUM ACETATE DIHYDRATE 99% AR



MSDS Number : 0051

Date : Aug 19<sup>th</sup>, 2024

Version : 1.0

### Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

### Control of environmental exposure

Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                                   |
|--|-----------------------------------|
| Appearance                                   | Form: solid                       |
| Odour  | slight acetic acid odor           |
| Odour Threshold                              | No data available                 |
| pH   | 7.1                               |
| Melting point/freezingpoint                  | Melting point/range: 254 - 256 °C |
| Initial boiling point and boiling range      | No data available                 |
| Flash point                                  | Not applicable                    |
| Evaporation rate                             | No data available                 |
| Flammability (solid, gas)                    | No data available                 |
| Upper/lower flammability or explosive limits | No data available                 |
| Vapour pressure                              | No data available                 |
| Vapour density                               | No data available                 |
| Relative density                             | 2,01 g/cm <sup>3</sup> at 20 °C   |
| Water solubility                             | No data available                 |
| Partition coefficient: octanol/water         | No data available                 |
| Auto-ignition temperature                    | No data available                 |
| Decomposition temperature                    | No data available                 |
| Viscosity                                    | No data available                 |
| Explosive properties                         | No data available                 |
| Oxidizing properties                         | No data available                 |

### 9.2 Other safety information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

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

## **CADMIUM ACETATE DIHYDRATE 99% AR**



MSDS Number : 0051

Date : Aug 19<sup>th</sup>, 2024

Version : 1.0

Strong oxidizing agents, Strong acids, strong alkalis

### **10.4 Conditions to avoid**

No data available

### **10.5 Incompatible materials**

No data available

### **10.6 Hazardous decomposition products**

In the event of fire: see section 5

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

Oral: No data available

Acute toxicity estimate Inhalation - 0,051 mg/l - dust/mist (Expert judgment)

Acute toxicity estimate Dermal - 1.100,1 mg/kg (Expert judgment)

#### **Skin corrosion/irritation**

No data available

#### **Serious eye damage/eye irritation**

No data available

#### **Respiratory or skin sensitisation**

No data available

#### **Germ cell mutagenicity**

In vivo tests showed mutagenic effects

#### **Carcinogenicity**

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Chronic exposure to cadmium may cause lung and prostate cancer. Presumed to have carcinogenic potential for humans

#### **Reproductive toxicity**

No data available

#### **Specific target organ toxicity - single exposure**

No data available

#### **Specific target organ toxicity - repeated exposure**

Causes damage to organs through prolonged or repeated exposure. - Bone, Kidney

#### **Aspiration hazard**

No data available

#### **Additional Information**

Endocrine disrupting properties

Product: Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.  
RTECS: AF7505000

# MATERIAL SAFETY DATA SHEET (SDS/MSDS)

## CADMIUM ACETATE DIHYDRATE 99% AR



MSDS Number : 0051

Date : Aug 19<sup>th</sup>, 2024

Version : 1.0

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Toxicity to daphnia and other aquatic invertebrates  
static test LC50 - Daphnia magna (Water flea) - 0,038 mg/l - 48 h (US-EPA)  
Remarks: The value is given in analogy to the following substances: Cadmium chloride

#### 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Product: Assessment :

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

##### Contaminated packaging

Dispose of as unused product.

### SECTION 14: Transport information

#### 14.1 UN number

ADR/RID: 2570

IMDG: 2570

IATA: 2570

#### 14.2 UN proper shipping name

ADR/RID: CADMIUM COMPOUND (Cadmium acetate dihydrate)

IMDG: CADMIUM COMPOUND (Cadmium acetate dihydrate).

IATA: Cadmium compound (Cadmium acetate dihydrate)

#### 14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

#### 14.4 Packaging group



No: F/QCL/002 Rev.00

ADR/RID: III

IMDG: III

IATA: III

**14.5 Environmental hazards**

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

**14.6 Special precautions for user**

**Further information**

No data available

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information**

**Full text of H-Statements referred to under sections 2 and 3.**

H302 Harmful if swallowed.

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

**National Fire Protection Association (U.S.A.):**

Health: 2

Flammability: 1

Reactivity: 0

**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. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.*

Version : 1.0

Revision Date : August 19, 2024