SECTION 1: Identification

1.1 GHS Product identifier

Product name Cadmium distearate

1.2 Other means of identification

Product number

Other names propionic acid, cadmium propionate; Stearinsaeure, Cadmium stearat; Cd stearate-d

1.3 Recommended use of the chemical and restrictions on use

Identified uses Industrial and scientific research uses.

Uses advised against no data available

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Acute toxicity - Category 4, Oral Acute toxicity - Category 4, Dermal Acute toxicity - Category 4, Inhalation

Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1 Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 1

2.2 GHS label elements, including precautionary statements

Pictogram(s)





Signal word Warning

Hazard statement(s) H302 Harmful if swallowed

H312 Harmful in contact with skin

H332 Harmful if inhaled

H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

Prevention P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection/...

P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

Response P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P317 Get medical help.

P321 Specific treatment (see ... on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P391 Collect spillage.

Storage none

Disposal P501 Dispose of contents/container to an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product characteristics at time of

disposal

2.3 Other hazards which do not result in classification

no data available

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Cadmium distearate	Cadmium distearate	2223-93-0	218-743-6	100%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

4.2 Most important symptoms/effects, acute and delayed

Similar to cadmium; acute toxicity most notably occurs secondary to cadmium ingestion or inhalation of cadmium fumes. Poisoning from inhalation is relatively rare but dangerous, having a mortality rate of about 15 percent. Toxic inhaled concentrations in humans have been reported at 147 mg/m3/35 minutes and at 1800 mg/m3/2 years. (EPA, 1998)

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand-valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR as necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. Cadmium and Related Compounds

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

If material on fire or involved in fire: Extinguish fire using agent suitable for type of surrounding fire. (Material itself does not burn or burns with difficulty.) Use water in flooding quantities as fog. Use "alcohol" foam, dry chemical or carbon dioxide. Cadmium compounds, NOS

5.2 Specific hazards arising from the chemical

It emits acrid smoke when heated to decomposition. (EPA, 1998)

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

Component	Cadmium distearate	Cadmium distearate				
CAS No.	2223-93-0	2223-93-0				
	Limit value - Eight hours		Limit value - Short term			
	ppm	mg/m ³	ppm	mg/m ³		
Latvia		0,1				

Component	Cadmium distearate
CAS No.	2223-93-0
	Remarks

Biological limit values

no data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. 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.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

SECTION 9: Physical and chemical properties and safety characteristics

Physical state Cadmium stearate is a solid. Used as a lubricant and stabilizer for polyvinyl chloride. (EPA,

1998)

White powder Colour Odour no data available 103-110°C Melting point/freezing point

Boiling point or initial boiling point

and boiling range

no data available

359.4°C at 760 mmHg

Flammability Lower and upper explosion no data available

limit/flammability limit

162.4°C Flash point no data available **Auto-ignition temperature** no data available **Decomposition temperature** no data available Kinematic viscosity no data available **Solubility** no data available Partition coefficient n-octanol/water no data available

Vapour pressure 8.58E-06mmHg at 25°C

1.28g/cm3 Density and/or relative density no data available Relative vapour density Particle characteristics no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No rapid reaction with air. No rapid reaction with water.

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

CADMIUM STEARATE has weak oxidizing or reducing powers. Redox reactions can however still occur. The majority of compounds in this class are slightly soluble or insoluble in water. If soluble in water, then the solutions are usually neither strongly acidic nor strongly basic. These compounds are not water-reactive.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

When heated to decomposition it emits toxic fumes of /cadmium/.

SECTION 11: Toxicological information

Acute toxicity

- Oral: LD50 Rat oral 1200 mg/kg bw
- Inhalation: LC50 Rat inhalation 130 mg/cu m/2 hours
- Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

CLASSIFICATION: B1; probable human carcinogen. BASIS FOR CLASSIFICATION: Limited evidence from occupational epidemiologic studies of cadmium is consistent across investigators and study populations. There is sufficient evidence of carcinogenicity in rats and mice by inhalation and intramuscular and subcutaneous injection. Seven studies in rats and mice wherein cadmium salts (acetate, sulfate, chloride) were administered orally have shown no evidence of carcinogenic response. HUMAN CARCINOGENICITY DATA: Limited. Classification based on former EPA guidelines

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

SECTION 12: Ecological information

12.1 Toxicity

- Toxicity to fish: LC50; Species: Oncorhynchus mykiss (Rainbow Trout) fingerling, length 6 cm, weight 2.5 g; Conditions: freshwater, static, 16.8 deg C, pH 7.2-7.3; Concentration: 5.2 ug/L for 10 days /total Cd ion
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

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 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

14.1 UN Number

ADR/RID: UN2570 (For reference only, please IMDG: UN2570 (For reference only, please IATA: UN2570 (For reference only, please check.)

14.2 UN Proper Shipping Name

ADR/RID: CADMIUM COMPOUND (For reference only, please check.)

IMDG: CADMIUM COMPOUND (For reference only, please check.)

IATA: CADMIUM COMPOUND (For reference only, please check.)

14.3 Transport hazard class(es)

ADR/RID: 6.1 (For reference only, please check.)

IMDG: 6.1 (For reference only, please check.)

IATA: 6.1 (For reference only, please check.)

14.4 Packing group, if applicable

ADR/RID: I (For reference only, please check.) IMDG: I (For reference only, please check.) IATA: I (For reference only, please check.)

14.5 Environmental hazards

ADR/RID: Yes IMDG: Yes IATA: Yes

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to IMO instruments

no data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number	
Cadmium distearate	Cadmium distearate	2223-93-0	218-743-6	
European Inventory of Existing Commercial Chemical Substances (EINECS)				
EC Inventory			Listed.	
United States Toxic Substances Control Act (TSCA) Inventory			Listed.	
China Catalog of Hazardous chemicals 2015				
New Zealand Inventory of Chemicals (NZIoC)				
Philippines Inventory of Chemicals and Chemical Substances (PICCS)				
Vietnam National Chemical Inventory				
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)				
Korea Existing Chemicals List (KECL)				

SECTION 16: Other information

Information on revision

Creation Date July 15, 2019 **Revision Date** July 15, 2019

Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- · RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

- IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

- IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA European Chemicals Agency, website: https://echa.europa.eu/