

MSDS# 03735

Section 1 - Chemical Product and Company Identification

MSDS Name: Cadmium acetate dihydrate
Catalog Numbers: AC317130000, AC317130050, AC317131000, C4-100, C4-500
Synonyms: Acetic acid, cadmium salt, dihydrate; Cadmium diacetate dihydrate.

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases:

CAS#: 5743-04-4
Chemical Name: Cadmium acetate dihydrate
%: 98
EINECS#: unlisted
Hazard Symbols:

Text for R-phrases: see Section 16

Hazard Symbols:



Risk Phrases:

T N



45 20/21/22 50/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Dangerous for the environment. May cause irritation. Harmful if swallowed, inhaled, or absorbed through the skin. Cancer hazard. Contains cadmium. Avoid creating dust. Can cause lung and kidney disease. Target Organs: Kidneys, lungs, skeletal structures, prostate.

Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation.
Ingestion: May cause irritation of the digestive tract.
Inhalation: May cause respiratory tract irritation.

Chronic: Prolonged or repeated exposure may cause permanent bone structure abnormalities. Chronic inhalation of cadmium compounds has been associated with lung and prostate cancer. The primary target organ for chronic cadmium disease is clearly the kidney.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. Get medical aid.

Notes to Physician:

Antidote: The use of Calcium disodium EDTA as a chelating agent should be determined by qualified medical personnel.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature: Not available.

Flash Point: Not available

Explosion Limits: Not available
Lower:

Explosion Limits: Not available
Upper:

NFPA Rating: health: 2; flammability: 1; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Do not breathe dust.

Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Cadmium acetate anhydrous	0.01 mg/m3 TWA (as Cd); 0.002 mg/m3 TWA (respirable fraction, as Cd) (listed under Cadmium compounds).	9 mg/m3 IDLH (dust and fume, as Cd) (listed under Cadmium compounds).	2.5 æg/m3 Action Level (as Cd); 5 æg/m3 TWA (as Cd, Do not eat, drink or chew tobacco or gum or apply cosmetics in regulated areas. Carcinogen - dust can cause lung and kidney disease. See 29 CFR
Cadmium acetate dihydrate	0.01 mg/m3 TWA (as Cd); 0.002 mg/m3 TWA (respirable fraction, as Cd) (listed under Cadmium compounds).	9 mg/m3 IDLH (dust and fume, as Cd) (listed under Cadmium compounds).	2.5 æg/m3 Action Level (as Cd); 5 æg/m3 TWA (as Cd, Do not eat, drink or chew tobacco or gum or apply cosmetics in regulated

| areas. |
| Carcinogen - |
| dust can cause |
| lung and kidney |
| disease. See |
| 29 CFR |

OSHA Vacated PELs: Cadmium acetate anhydrous: None listed Cadmium acetate dihydrate: None listed

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. See 29CFR 1910.1027 for regulations applying to all occupational exposures to cadmium and cadmium compounds, in all forms.

Exposure Limits

Personal Protective Equipment

Eyes: 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: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: 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.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: white

Odor: acetic odor - weak odor

pH: Not available

Vapor Pressure: Not applicable.

Vapor Density: Not available

Evaporation Rate: Not applicable.

Viscosity: Not applicable.

Boiling Point: Not available

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: Soluble

Specific Gravity/Density: 2.01

Molecular Formula: C4H10CdO6

Molecular Weight: 266.53

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Dust generation, confined spaces.

Incompatibilities with Other Materials: Not available

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, cadmium fumes.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 543-90-8: EU9810000
CAS# 5743-04-4: AF7505000

RTECS:

CAS# 543-90-8: Oral, rat: LD50 = 333 mg/kg;

LD50/LC50:

RTECS:

CAS# 5743-04-4: Oral, rat: LD50 = 360 mg/kg;

Cadmium acetate anhydrous - California: carcinogen, initial date 10/1/87 (Cadmium compounds). NTP: Known carcinogen (Cadmium compounds). IARC: Group 1 carcinogen
Carcinogenicity: Cadmium acetate dihydrate - California: carcinogen, initial date 10/1/87 (Cadmium compounds). NTP: Known carcinogen (Cadmium compounds). IARC: Group 1 carcinogen (Cadmium compounds).
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: CADMIUM COMPOUNDS

Hazard Class: 6.1

UN Number: UN2570

Packing Group: III

Canada TDG

Shipping Name: Cadmium Compounds

Hazard Class: 6.1

UN Number: UN2570

Packing Group: III

USA RQ: CAS# 543-90-8: 10 lb final RQ; 4.54 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T N

Risk Phrases:

R 45 May cause cancer.

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 60 This material and its container must be disposed of as hazardous waste.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 543-90-8: 3

CAS# 5743-04-4: Not available

Canada

CAS# 543-90-8 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2A, D1B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 543-90-8 is listed on Canada's Ingredient Disclosure List

CAS# 5743-04-4 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 543-90-8 is listed on the TSCA Inventory.

CAS# 5743-04-4 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the Inventory (40CFR720.3(u)(2)).

Section 16 - Other Information

MSDS Creation Date: 12/12/1997

Revision #7 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
