

## SAFETY DATA SHEET

Preparation Date: 5/17/2017

Revision Date: 5/17/2017

Revision Number: G1

### 1. IDENTIFICATION

**Product identifier**

**Product code:** C1042  
**Product Name:** CADMIUM NITRATE, CRYSTAL, PURIFIED

**Other means of identification**

**Synonyms:** Cadmium dinitrate tetrahydrate

**CAS #:** 10022-68-1  
**RTECS #** EV1850000  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** No information available.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000.

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300

**Contact Person:** Martin LaBenz (West Coast)

**Contact Person:** Ibad Tirmiz (East Coast)

### 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 1
Oxidizing solids	Category 3

**Label elements**

**Danger**

**Hazard statements**

Toxic if swallowed

Fatal if inhaled  
Causes skin irritation  
Causes serious eye irritation  
May cause cancer  
May damage fertility or the unborn child  
Causes damage to organs through prolonged or repeated exposure  
May intensify fire; oxidizer



**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Very toxic to aquatic life with long lasting effects  
Very toxic to aquatic life

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Do not breathe dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear respiratory protection  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep/Store away from clothing and other combustible materials  
Take any precaution to avoid mixing with combustibles  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

*Immediately call a POISON CENTER or doctor/physician*

IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO<sub>2</sub> or Halon may provide limited control.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

**Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Product code:** C1042

**Product name:** CADMIUM NITRATE,  
CRYSTAL, PURIFIED

2 / 14

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Cadmium Nitrate, tetrahydrate	10022-68-1	100

### 4. FIRST AID MEASURES

#### First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention.
- Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
- Ingestion:** Toxic if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

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

- Symptoms** Contact causes skin irritation. Moderate skin irritation. Causes serious eye irritation. Moderate eye irritation. May cause gastrointestinal disturbances. May cause nausea and vomiting. Abdominal pain. May cause pulmonary edema. May cause bronchitis. May cause emphysema. It may affect the kidneys. May affect the blood and cause anemia. Exposure to nitrites/nitrates can cause gastroenteritis, abdominal pain, nausea, vomiting, diarrhea, metabolic acidosis, purging, methemoglobinemia, cyanosis, muscle weakness, dizziness, lightheadedness, loss of coordination, fatigue, headache, seizures, convulsions, dyspnea, dysrhythmias, coma, and death. Can affect the liver, metabolism (weight loss), blood (methemoglobinemia), cardiovascular system (bradycardia/tachycardia, hypotension, vasodilation, irregular heartbeat), kidneys.

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

- Notes to Physician:** Treat symptomatically.

#### Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

### 5. FIRE-FIGHTING MEASURES

#### Extinguishing Media

- Suitable Extinguishing Media:** Water. CO2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.
- Unsuitable Extinguishing Media:** Dry chemical. Foam. Halons.

## Specific hazards arising from the chemical

### **Hazardous Combustion Products:**

Nitrogen Oxides. Cadmium oxide.

### **Specific hazards:**

Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.). The product is not flammable, but it may cause fire when in contact with other material. Contact with combustible or organic materials may cause fire. Will accelerate burning when involved in a fire. Container explosion may occur under fire conditions or when heated.

## Special Protective Actions for Firefighters

### **Specific Methods:**

For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. DO NOT use combustible materials such as sawdust.

### **Special Protective Equipment for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## **6. ACCIDENTAL RELEASE MEASURES**

### Personal precautions, protective equipment and emergency procedures

#### **Personal Precautions:**

Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

#### **Methods for containment**

Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

#### **Methods for cleaning up**

Sweep up and shovel into suitable containers for disposal. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill. Clean contaminated surface thoroughly.

## **7. HANDLING AND STORAGE**

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

#### **Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe vapors/dust. Do not ingest. Do not smoke. Keep away from combustible material. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Technical Measures/Storage Conditions:**

Hygroscopic. Protect from moisture. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Do not store near combustible materials. Store in a segregated and approved area.

**Incompatible Materials:**

Organic materials  
 Combustible materials  
 Reducing agents  
 Powdered metals  
 Copper  
 Copper alloys  
 Phosphorus

<b>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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**Control parameters****National occupational exposure limits****United States**

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Cadmium Nitrate, tetrahydrate	10022-68-1	None	None	0.01 mg/m <sup>3</sup> TWA (as Cd); 0.002 mg/m <sup>3</sup> TWA (respirable particulate matter, as Cd)	None

**Canada**

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Cadmium Nitrate, tetrahydrate	10022-68-1	0.01 mg/m <sup>3</sup> TWA (as Cd)	0.01 mg/m <sup>3</sup> TWA (as Cd); 0.002 mg/m <sup>3</sup> TWA (respirable particulate matter, as Cd)	0.01 mg/m <sup>3</sup> TWA (as Cd); 0.002 mg/m <sup>3</sup> TWA (respirable particulate matter, as Cd)	0.025 mg/m <sup>3</sup> TWAEV (as Cd)

**Australia and Mexico**

Components	CAS-No.	Australia	Mexico
Cadmium Nitrate, tetrahydrate	10022-68-1	None	0.01 mg/m <sup>3</sup> TWA (total dust as Cd); 0.002 mg/m <sup>3</sup> TWA (respirable particulate matter, as Cd)

**Appropriate engineering controls****Engineering measures to reduce exposure:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Individual protection measures, such as personal protective equipment****Personal Protective Equipment**

<b>Eye protection:</b>	Goggles
<b>Skin and body protection:</b>	Chemical resistant apron Long sleeved clothing Gloves
<b>Respiratory protection:</b>	Wear respirator with dust filter.
<b>Hygiene measures:</b>	Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Solid	<b>Appearance:</b> Crystals.	<b>Color:</b> White. Off-white.
<b>Odor:</b> No information available.	<b>Taste</b> No information available.	<b>Formula:</b> Cd(NO3)2.4H2O
<b>Molecular/Formula weight:</b> 308.47	<b>Flammability:</b> No information available	<b>Flashpoint (°C/°F):</b> No information available.
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 59.5 (°C)/139.1 (°F)	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> 132 (°C)/269.6 (°F)	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> 2.46	<b>pH:</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> No information available	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Very soluble in water Solubility in Water: 2150 g/l at 20°C	

## 10. STABILITY AND REACTIVITY

**Reactivity**  
No information available

### Chemical stability

**Stability:** Hygroscopic. Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Exposure to moisture. Exposure to moist air. Incompatible materials. Contact with combustible materials (wood, paper, oil, clothing, etc.).

**Incompatible Materials:** Organic materials  
Combustible materials  
Reducing agents  
Powdered metals  
Copper  
Copper alloys  
Phosphorus

**Hazardous decomposition products:** Nitrogen oxides (NOx). Cadmium oxide.

**Other Information**  
**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Skin. Eyes. Inhalation. Ingestion.

### Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document  
**Component Information**

Cadmium Nitrate, tetrahydrate	
CAS-No.	10022-68-1

**LD50/oral/rat** = 300 mg/kg Oral LD50 Rat  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rabbit** = No information available  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50 information** = No information available

### Product Information

**LD50/oral/rat** =  
**VALUE- Acute Tox Oral** = 300 mg/kg

**LD50/oral/mouse** =  
**Value - Acute Tox Oral** = No information available

**LD50/dermal/rabbit**  
**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**  
**VALUE -Acute Tox Dermal** = No information available

**LC50/inhalation/rat**  
**VALUE-Vapor** = No information available  
**VALUE-Gas** = No information available  
**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

**Symptoms****Skin Contact:** Causes skin irritation. Severe skin irritation.**Eye Contact:** Causes serious eye irritation. Moderately irritating to the eyes.**Inhalation** Fatal if inhaled. Symptoms may include coughing and wheezing, and shortness of breath. Symptoms may include coughing, chest pain, difficulty breathing. It may cause pulmonary edema.**Ingestion** Toxic if swallowed. May cause gastrointestinal disturbances. May cause gastroenteritis. May cause abdominal pain, nausea, vomiting, diarrhea. May cause metabolic acidosis. May affect the cardiovascular system (hypotension). May cause hyperglycemia. May cause salivation. May cause edema and swelling of the throat.**Aspiration hazard** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Chronic Toxicity** Chronic exposure may affect the kidneys and cause kidney damage. Prolonged or repeated inhalation may cause bronchitis with coughing, phlegm, and/or shortness of breath. Prolonged or repeated inhalation may cause emphysema. Prolonged or repeated inhalation may cause anemia. Chronic ingestion may cause electrolyte imbalance. Chronic ingestion may cause hypocalcemia, hypophosphatemia. Chronic exposure may cause osteomalacia, osteoporosis (widespread bone pain) with difficulty walking and increased fracture risk after slight trauma. This product is also a nitrate, therefore nitrate poisoning can occur. Prolonged or repeated nitrate ingestion may affect the urinary system (kidneys) and also may affect the blood, resulting in methemoglobin with attendant cyanosis, anorexia, hyperpnea and later dyspnea and chocolate brown colored blood. The primary toxic effects of nitrates include orthostatic hypotension and methemoglobinemia, Other symptoms include muscular weakness, faintness, dizziness, lightheadedness, fatigue, throbbing headache, mental impairment, incoordination, seizures, and convulsions, bradycardia or tachycardia, dysrhythmias, dyspnea. Prolonged or repeated ingestion of large amounts of nitrates may affect the liver and can cause gastroenteritis, nausea, vomiting, abdominal pain, weight loss. Possible coma and death.**Sensitization:** No information available.**Mutagenic Effects:** No information available**Carcinogenic effects:** May cause cancer.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Cadmium Nitrate, tetrahydrate	10022-68-1	Group 1 - Carcinogenic to Humans - monograph	A2 - Suspected Human Carcinogen (Cadmium	Known human carcinogens (Cadmium and Cadmium	Present	Not listed	Not listed



		100C [2012]; monograph 58 [1993]; Supplement 7 [1987] (cadmium compounds) Group 2A - Probably Carcinogenic to Humans - monograph 94 [2010] (covers ingested nitrates under conditions that result in endogenous nitrosation)	compounds)	compounds)			
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ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

**Reproductive toxicity** May damage fertility or the unborn child

**Reproductive Effects:** May cause adverse reproductive effects

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.

**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Target Organs:** Respiratory system. Kidneys. Blood.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** No data available.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

**13. DISPOSAL CONSIDERATIONS**

**Disposal Methods**

**Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal

**Product code:** C1042

**Product name:** CADMIUM NITRATE,  
CRYSTAL, PURIFIED

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Cadmium Nitrate, tetrahydrate	10022-68-1	None	None	None	None

## 14. TRANSPORT INFORMATION

### DOT

**UN-No:** UN1477  
**Proper Shipping Name:** Nitrates, inorganic, n.o.s. (cadmium nitrate)  
**Hazard Class:** 5.1  
**Subsidiary Class:** No information available  
**Packing group:** III  
**Emergency Response Guide Number:** 140  
**Marine Pollutant:** Marine Pollutant  
**DOT RQ (lbs):** No information available  
**Special Provisions:** IB8, IP3, T1, TP33  
**Symbol(s):** No information available  
**Description:** UN1477, Nitrates, inorganic, n.o.s., 5.1, III

### TDG (Canada)

**UN-No:** UN1477  
**Proper Shipping Name:** Nitrates, inorganic, n.o.s. (cadmium nitrate)  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant:** Marine Pollutant  
**Description:** UN1477, Nitrates, inorganic, n.o.s., 5.1, III

### ADR

**UN-No:** UN1477  
**Proper Shipping Name:** Nitrates, inorganic, n.o.s. (cadmium nitrate)  
**Hazard Class:** 5.1  
**Packing Group:** III  
**Subsidiary Risk:** No information available  
**Special Provisions:** 511  
**Description:** UN1477, Nitrates, inorganic, n.o.s., 5.1, III

### IMO / IMDG

**UN-No:** UN1477  
**Proper Shipping Name:** Nitrates, inorganic, n.o.s. (cadmium nitrate)  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant:** Marine Pollutant  
**EMS:** F-A  
**Special Provisions:** 223  
**Description:** UN1477, Nitrates, inorganic, n.o.s., 5.1, III

### RID

**UN-No:** UN1477  
**Proper Shipping Name:** Nitrates, inorganic, n.o.s. (cadmium nitrate)  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Special Provisions:** 511  
**Description:** UN1477, Nitrates, inorganic, n.o.s., 5.1, III

**ICAO**

**UN-No:** UN1477  
**Proper Shipping Name:** Nitrates, inorganic, n.o.s. (cadmium nitrate)  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Description:** UN1477, Nitrates, inorganic, n.o.s., 5.1, III  
**Special Provisions** A3

**IATA**

**UN-No:** UN1477  
**Proper Shipping Name:** Nitrates, inorganic, n.o.s. (cadmium nitrate)  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**ERG Code:** 5L  
**Special Provisions** No information available  
**Description:** UN1477, Nitrates, inorganic, n.o.s., 5.1, III

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Cadmium Nitrate, tetrahydrate</i>	10022-68-1	Not Listed	Not present	Present	Present (1)-201	Present	Present	Not present

**U.S. Regulations***Cadmium Nitrate, tetrahydrate*

**New Jersey RTK Hazardous Substance List:** Present SN 2199 and SN3722  
**New Jersey (EHS) List:** SN 2199 and SN 3722 500 lb. TPQ  
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present  
**Minnesota - Hazardous Substance List:** present (carcinogen)  
**California Directors List of Hazardous Substances:** Present (Cadmium compounds)

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.****Chemicals Known to the State of California to Cause Cancer:**

 **WARNING:** This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause cancer. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Cadmium Nitrate, tetrahydrate	10022-68-1	carcinogen (cadmium and cadmium compounds)	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis

Product code: C1042

Product name: CADMIUM NITRATE,  
CRYSTAL, PURIFIED

11 / 14

Cadmium Nitrate, tetrahydrate	10022-68-1	None	None	None	Cadmium compounds	0.1%
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## U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Cadmium Nitrate, tetrahydrate	10022-68-1	Not Applicable	Not Applicable

## Canada

### WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component  
Cadmium Nitrate, tetrahydrate  
10022-68-1 ( 100 )

WHMIS 2015 Hazard Classification  
WHMIS 2015 classification information for Cadmium Nitrate (CAS no. 10325-94-7):Oxidizing solids - Category 3: H272 May intensify fire, oxidizer.; Acute toxicity - Oral - Category 3: H301 Toxic if swallowed. (toxicity of Cadmium compounds is related to the presence of Cd(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Cadmium compounds); Germ cell mutagenicity - Category 2: H341 Suspected of causing genetic defects. (toxicity of Cadmium compounds is related to the presence of Cd(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Cadmium compounds); Carcinogenicity - Category 1A: H350 May cause cancer. (toxicity of Cadmium compounds is related to the presence of Cd(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Cadmium compounds); Reproductive Toxicity - Category 2: H361 Suspected of damaging fertility or the unborn child. (toxicity of Cadmium compounds is related to the presence of Cd(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Cadmium compounds); Specific target organ toxicity - Repeated exposure - Category 1: H372 Causes damage to organs through prolonged or repeated exposure. (toxicity of Cadmium compounds is related to the presence of Cd(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Cadmium compounds)

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

### WHMIS 1988 Hazard Class

For Cadmium nitrate (CAS no. 10325-94-7):

C Oxidizing materials  
D1A Very toxic materials  
D2A Very toxic materials

### Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

## Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Cadmium Nitrate, tetrahydrate	10022-68-1	Not Listed	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
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Product code: C1042

Product name: CADMIUM NITRATE,  
CRYSTAL, PURIFIED

12 / 14

Cadmium Nitrate, tetrahydrate	10022-68-1	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Cadmium Nitrate, tetrahydrate	10022-68-1	Not listed

## EU Classification

### EU GHS - SV - CLP 172/2008

Components	CAS-No.	EU GHS - SV - CLP (172/2008)
Cadmium Nitrate, tetrahydrate	10022-68-1	Acute toxicity - Oral - Acute Tox. 4: H302 Harmful if swallowed. (Minimum classification, except Cadmium sulphoselenide, reaction mass of Cadmium sulphide with Zinc sulphide, reaction mass of Cadmium sulphide with Mercury sulphide, and those specified elsewhere in this Annex); Acute toxicity - Dermal - Acute Tox. 4: H312 Harmful in contact with skin. (Minimum classification, except Cadmium sulphoselenide, reaction mass of Cadmium sulphide with Zinc sulphide, reaction mass of Cadmium sulphide with Mercury sulphide, and those specified elsewhere in this Annex); Acute toxicity - Inhalation - Acute Tox. 4: H332 Harmful if inhaled. (Minimum classification, except Cadmium sulphoselenide, reaction mass of Cadmium sulphide with Zinc sulphide, reaction mass of Cadmium sulphide with Mercury sulphide, and those specified elsewhere in this Annex); Hazardous to aquatic environment - acute hazard - Aquatic Acute 1: H400 Very toxic to aquatic life. (except Cadmium sulphoselenide, reaction mass of Cadmium sulphide with Zinc sulphide, reaction mass of Cadmium sulphide with Mercury sulphide, and those specified elsewhere in this Annex); Hazardous to aquatic environment - chronic hazard - Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects. (except Cadmium sulphoselenide, reaction mass of Cadmium sulphide with Zinc sulphide, reaction mass of Cadmium sulphide with Mercury sulphide, and those specified elsewhere in this Annex)048-001-00-5

### EU - CLP (1272/2008)

#### **R-phrase(s)**

not determined (not applicable)

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### **S -phrase(s)**

none

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Cadmium Nitrate, tetrahydrate	10022-68-1	Xn; R20/21/22 N; R50-53 (cadmium compounds)	0.1%≤C: Xn; 20/21/22 (cadmium compounds)	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

Xn - Harmful.

N - Dangerous for the environment.

Xn



N



## 16. OTHER INFORMATION

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Prepared by: Sonia Owen

**Disclaimer:**

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**End of Safety Data Sheet**