



Material Safety Data Sheet Cadmium AA Standard, 1000ppm (1ml=1mg Cd)

Section 1 - Chemical Product and Company Identification

MSDS Name:

Cadmium AA Standard, 1000ppm (1ml=1mg Cd)

Catalog Numbers:

LC12600

Synonyms:

Cadmium reference solution, 1000ppm

Company Identification:

LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300 or
(011) 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
7697-37-2	Nitric acid	4
7440-43-9	Cadmium	0.1

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless solution

Warning! May cause irritation or burns to eyes and skin. May be harmful if swallowed. May cause cancer. May cause harm to the unborn child.

Target Organs: Lungs, liver, kidneys, prostate.

Potential Health Effects

Eye:

May cause eye irritation or burns. Severity depends on length of exposure.

Skin:

May cause skin irritation or burns. Severity depends on length of exposure.

Ingestion:

May be harmful if swallowed. May cause irritation or burns to the gastrointestinal tract with nausea, vomiting, and diarrhea.



Material Safety Data Sheet Cadmium AA Standard, 1000ppm (1ml=1mg Cd)

Inhalation:

May cause respiratory tract irritation.

Chronic:

Cadmium and compounds may cause lung, liver and kidney damage and lung and prostate cancer in humans.

Section 4 - First Aid Measures

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

Skin:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid at once.

Ingestion:

Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:

Move victim to fresh air immediately. If breathing is difficult, administer oxygen. Give artificial respiration if necessary. Get medical aid at once.

Notes to Physician:

Treat symptomatically and supportively.

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. Containers may explode in the heat of a fire. Contact with metals may evolve flammable hydrogen gas.

Extinguishing Media:

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

Autoignition Temperature:

Not available

Flash Point:

Not applicable

NFPA Rating:

Health- 2, Flammability- 0, Instability- 1

Explosion Limits:

Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.



Material Safety Data Sheet Cadmium AA Standard, 1000ppm (1ml=1mg Cd)

Spills/Leaks:

Absorb spill with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Do not ingest or inhale. Avoid contact with eyes, skin, and clothing.

Storage:

Store tightly closed away from direct sunlight. Protect from heat and incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities using or storing this material should be equipped with an eyewash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Nitric acid	2 ppm TWA; 5 mg/m ³ TWA	2 ppm TWA; 5 mg/m ³ TWA	2 ppm TWA; 4 ppm STEL
Cadmium	NIOSH Potential Occupational Carcinogen - see Appendix A 0.2 mg/m ³ TWA (dust); 0.1 mg/m ³ TWA (fume);	C 0.6 mg/m ³ (dust); C 0.3 mg/m ³ (fume); apply only to exempt operations	2.5 ug/m ³ TWA action level; 0.01 mg/m ³ TWA

OSHA Vacated PELs:

Nitric acid: 2 ppm TWA; 5 mg/m³ TWA
Cadmium: see 1910.1027

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. Do not wear contact lenses when working with chemicals.

Skin:

Wear appropriate protective 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. Always use a NIOSH-approved respirator when necessary.



Material Safety Data Sheet
Cadmium AA Standard, 1000ppm (1ml=1mg Cd)

Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	Colorless
Odor:	Odorless
pH:	Acidic
Vapor Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	1.0
Molecular Formula:	Not available
Molecular Weight:	Not available

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, excess heat, sunlight.

Incompatibilities with Other Materials:

Bases, amines, metallic oxides, easily reduced substances, combustible and flammable liquids.

Hazardous Decomposition Products:

Nitric oxides, cadmium metal.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.
CAS# 7697-37-2: QU5775000; QU5900000.
CAS# 7440-43-9: EU9800000.

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg
CAS# 7697-37-2:
Inhalation, rat: LC50 =67 ppm(NO2)/4H
CAS# 7440-43-9:
Inhalation, rat: LC50 =25 mg/m3/30M
Oral, mouse: LD50 = 890 mg/kg

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop



Material Safety Data Sheet Cadmium AA Standard, 1000ppm (1ml=1mg Cd)

65.

CAS# 7697-37-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop

65.

CAS# 7440-43-9: Listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, and CA Prop 65.

Epidemiology:

Studies indicate occupational exposure to cadmium increases the risk of prostate and respiratory cancers in man.

Teratogenicity:

No information found

Reproductive:

No information found

Mutagenicity:

No information found

Neurotoxicity:

No information found

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid)

Hazard Class: 8

UN Number: UN3264

Packing Group: PG II

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 7697-37-2 is listed on the TSCA Inventory.

CAS# 7440-43-9 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 7697-37-2: final RQ = 1000 pounds (454 kg)

CAS# 7440-43-9: final RQ = 10 pounds (4.54 kg)

CERCLA/SARA Section 313:

This material contains Cadmium (CAS# 7440-43-9, 0.1%) and Nitric acid (CAS# 7697-37-2, 4%), which are subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.



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OSHA - Highly Hazardous:

CAS# 7697-37-2 is considered highly hazardous by OSHA.

US State

State Right to Know:

Nitric acid can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Cadmium can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations:

WARNING: This product contains Cadmium, a chemical known to the state of California to cause birth defects or other reproductive harm.

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 7697-37-2 is listed on Canada's DSL List.

CAS# 7440-43-9 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7697-37-2 is listed on Canada's Ingredient Disclosure List.

CAS# 7440-43-9 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: July 20, 1998

Revision Date: August 23, 2010

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