



Material Safety Data Sheet
Calcium AA Standard, 1ml=1mg Ca (1000ppm)

Section 1 - Chemical Product and Company Identification

MSDS Name:

Calcium AA Standard, 1ml=1mg Ca (1000ppm)

Catalog Numbers:

LC12650

Synonyms:

alcium reference standard, 1000ppm Ca

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

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
471-34-1	Carbonic acid, calcium salt (1:1)	0.24
7697-37-2	Nitric acid	0.2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless

Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Target Organs: none known.

Potential Health Effects**Eye:**

May cause mild eye irritation.

Skin:

May cause mild skin irritation.



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Ingestion:

May cause irritation of the digestive tract.

Inhalation:

May cause respiratory tract irritation.

Chronic:

May cause dermatitis and conjunctivitis.

Section 4 - First Aid Measures

Eyes:

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. Cover burns with loose sterile non-medicated bandages.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes. Cover burns with a dry sterile bandage (secure, not tight).

Ingestion:

Give 1 ounce of milk of magnesia. Do not use gastric lavage or induce vomiting. Medical personnel should maintain airway and respiration, treat for shock. Give conscious non-convulsive victim large quantities of water, do not induce vomiting.

Inhalation:

Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

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. Negligible fire and explosion hazard when exposed to heat or flame. Move container if possible, avoid breathing vapors or dust.

Extinguishing Media:

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

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 7732-18-5: Not published.

CAS# 471-34-1: Not published.

CAS# 7697-37-2: Not published.

Explosion Limits:

Lower: Upper:



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Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Keep out of sewers/drains. Scoop material into suitable (plastic or glass) container, label for disposal as "corrosive".

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

Storage:

Store capped at room temperature. Store in glass or approved plastic containers only, keep capped. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Provide local exhaust or general dilution ventilation. Work under a hood - SAR/SCBA (high levels).

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.
Carbonic acid, calcium salt (1:1)	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; 4 ppm STEL	2 ppm TWA; 5 mg/m ³ TWA	2 ppm TWA; 5 mg/m ³ TWA;

OSHA Vacated PELs

Nitric acid: 2 ppm TWA; 5 mg/m³ TWA

Personal Protective Equipment

Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

Skin:

Wear impervious gloves (viton, saranex).

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Not required for normal use.



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Section 9 - Physical and Chemical Properties

Physical State: Clear liquid
Color: colorless
Odor: odorless
pH: acidic
Vapor Pressure: 14mm Hg @20°C
Vapor Density: > air
Evaporation Rate: < ether
Viscosity: No information found.
Boiling Point: 212°F (100.00°C)
Freezing/Melting Point: 32°F (0.00°C)
Decomposition Temperature: No information found.
Solubility in water: Soluble.
Specific Gravity/Density: 1.0
Molecular Formula: No information found.
Molecular Weight: No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials

Water reactive substances (e.g. sulfuric acid, sodium metal, potassium metal, calcium carbide), concentrated alkalies, amines, metallic oxides.

Hazardous Decomposition Products

Nitric acid vapors and nitric oxides are quietly evolved - this reaction is catalyzed by sunlight.

Hazardous Polymerization

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 471-34-1: FF9335000.

CAS# 7697-37-2: QU5775000; QU5900000.



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LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 471-34-1:

Oral, rat: LD50 = 6450 mg/kg.

CAS# 7697-37-2:

Inhalation, rat: LC50 =67 ppm(NO2)/4H.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 471-34-1: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7697-37-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

Nitric acid--severe eye, skin, mucous membrane irritant.

Cadmium-

studies indicate occupational exposure to cadmium increases risk of prostate and respiratory cancer in man.

Teratogenicity:

Reproductive:

Mutagenicity

Neurotoxicity

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: Not regulated.

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA

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

CAS# 471-34-1 is listed on the TSCA Inventory.

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



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SARA Reportable Quantities (RQ)

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

CERCLA/SARA Section 313

Nitric acid is not at a high enough concentration to be reportable under Section 313.

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.

California Regulations

European/International Regulations

Canadian DSL/NDSL

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

CAS# 471-34-1 is listed on Canada's DSL List.

CAS# 7697-37-2 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# 471-34-1 is not listed on Canada's Ingredient Disclosure List.

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

Section 16 - Other Information

MSDS Creation Date: July 21, 1998

Revision Date: March 10, 2004

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