ISO9001:2000 Certified

Material Safety Data Sheet
Magnesium Standard, 1000 ppm

Section 1 - Chemical Product and Company Identification

MSDS Name:
Magnesium Standard, 1000 ppm
Catalog Numbers:
LC16480
Synonyms:
None
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
1309-48-4	Magnesium oxide	0.17
7697-37-2	Nitric acid	3
7732-18-5	Water	balance

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Clear, colorless solution*
Danger! May cause severe eye irritation and possible injury. Causes skin and respiratory tract irritation. Corrosive to metal.
Target Organs: *Eyes*

Potential Health Effects

Eye:
Causes eye burns. May cause irreversible eye injury. May cause chemical conjunctivitis and corneal damage.
Skin:
Causes skin irritation.
Ingestion:
May cause irritation of the digestive tract. May cause systemic effects.
Inhalation:
Effects may be delayed. Causes respiratory tract irritation. May cause systemic effects.

Chronic:

Exposure to high concentrations of nitric acid vapor may cause pneumonitis and pulmonary edema, which may be fatal. Symptoms may or may not be delayed. Continued exposure to the vapor & mist of nitric acid may result in a chronic bronchitis, & more severe exposure results in a chemical pneumonitis. The vapor & mists of nitric acid may erode the teeth, particularly affecting the canines & incisors.

Section 4 - First Aid Measures

Eyes:

Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin:

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

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. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Containers may explode in the heat of a fire. Contact with metals may evolve flammable hydrogen gas. Runoff from fire control or dilution water may cause pollution.

Extinguishing Media:

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature:

Not applicable

Flash Point:

Not applicable

NFPA Rating:

Not available

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.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Neutralize spill with sodium bicarbonate. Provide ventilation.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Discard contaminated shoes.

Storage:

Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Magnesium oxide	10 mg/m3 TWA (inhalable fraction)	750 mg/m3 IDLH (fume)	15 mg/m3 TWA (total particulate)
Nitric acid	2 ppm TWA; 4 ppm STEL	2 ppm TWA; 5 mg/m3 TWA 25 ppm IDLH	2 ppm TWA; 5 mg/m3 TWA
Water	none listed	none listed	none listed

OSHA Vacated PELs:

Magnesium oxide: 10 mg/m3 TWA (total particulate)
Nitric acid: 2 ppm TWA; 5 mg/m3 TWA

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:	Liquid
Color:	Colorless
Odor:	Odorless
pH:	Acidic
Vapor Pressure:	14 mm Hg @ 20 C
Vapor Density:	0.7
Evaporation Rate:	>1 (ether = 1)
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	Not available
Molecular Formula:	Not applicable
Molecular Weight:	Not applicable

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

High temperatures.

Incompatibilities with Other Materials:

Oxidizing agents, strong bases.

Hazardous Decomposition Products:

Nitrogen oxides, magnesium oxides.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 1309-48-4: OM3850000
CAS# 7697-37-2: QU5775000, QU5900000
CAS# 7732-18-5: ZC0110000

LD50/LC50:

CAS# 1309-48-4:
Not available
CAS# 7697-37-2:
Inhalation, rat: LC50 = 260 mg/m3/30M;
Inhalation, rat: LC50 = 130 mg/m3/4H;
Inhalation, rat: LC50 = 67 ppm (NO2)/4H

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg

Carcinogenicity:
CAS# 1309-48-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 7697-37-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology:
No information found

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
Hazard Class: 8
UN Number: UN3264
Packing Group: III

Section 15 - Regulatory Information

US Federal

TSCA:
CAS# 1309-48-4 is listed on the TSCA inventory.
CAS# 7697-37-2 is listed on the TSCA inventory.
CAS# 7732-18-5 is listed on the TSCA inventory.

SARA Reportable Quantities (RQ):
CAS# 7697-37-2: 1000 lb. final RQ; 454 kg final RQ

CERCLA/SARA Section 313:
This material contains Nitric acid (CAS# 7697-37-2, 3%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:

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

US State

State Right to Know:

CAS# 1309-48-4 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 7697-37-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Regulations:

None

European/International Regulations

Canadian DSL/NDSL:

CAS# 1309-48-4 is listed on Canada's DSL List.

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

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

Canada Ingredient Disclosure List:

CAS# 1309-48-4 is listed on the Canadian Ingredient Disclosure List.

CAS# 7697-37-2 is listed on the Canadian Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on the Canadian Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 28, 2007
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