



Material Safety Data Sheet Hydrazine Standards, 50ppm - 1000ppm

Section 1 - Chemical Product and Company Identification

MSDS Name:

Hydrazine Standards, 50ppm - 1000ppm

Catalog Numbers:

LC14930

Synonyms:

Hydrazine Reference Solution

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 |
| 7647-01-0 | Hydrochloric acid | 1 |
| 5341-61-7 | Hydrazine dihydrochloride | <0.4 |

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless solution**Warning.** Corrosive. Causes eye and skin irritation and possible burns. May cause skin and respiratory sensitization. May cause cancer.**Target Organs:** Liver, kidneys, blood, eyes, skin, respiratory tract.

Potential Health Effects

Eye:

Causes severe eye irritation or burns.

Skin:

Causes irritation or burns. May cause skin sensitization.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting, and diarrhea.

Inhalation:

May cause respiratory tract irritation. May cause respiratory sensitization.



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Chronic:

May cause liver and kidney damage. May cause cancer.

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.

Ingestion:

Do NOT induce vomiting. Give conscious victim large quantities of water to dilute. Get medical aid at once.

Inhalation:

Move victim to fresh air immediately. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. 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.

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: Health- 0, Flammability- 0, Instability- 0.

CAS# 7647-01-0: Health- 3, Flammability- 0, Instability- 1.

CAS# 5341-61-7: Health- 2, Flammability- 0, Instability- 0.

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 spills with absorbent (vermiculite, sand, fuller's earth) and place in suitable containers labeled for later disposal. Area may be washed down with water.



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Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Do not ingest or inhale. Do not get in eyes, on skin, or on clothing.

Storage:

Store capped at room temperature. Protect from heat and incompatibles.

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 |
| Hydrochloric acid | 2 ppm Ceiling | 50 ppm IDLH | 5 ppm Ceiling 7 mg/m ³ Ceiling |
| Hydrazine dihydrochloride | None of the components are on this list. | None of the components are on this list. | None of the components are on this list. |

OSHA Vacated PELs:

None.

Personal Protective Equipment**Eyes:**

Do not wear contact lenses when working with chemicals. 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 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 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: | Clear liquid |
| Color: | Colorless |
| Odor: | Odorless |
| pH: | Acidic |
| Vapor Pressure: | Not available |
| Vapor Density: | > air |
| Evaporation Rate: | < ether |



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| | |
|-----------------------------------|---------------|
| 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. May decompose if heated above 200°C.

Conditions to Avoid:

Incompatible materials, excess heat.

Incompatibilities with Other Materials:

Metal nitrates, heat, cyanides (e.g. potassium cyanide, sodium cyanide), sulfides (inorganic, e.g. ferric sulfide, lead sulfide, sodium sulfide), sulfites, formaldehyde.

Hazardous Decomposition Products:

Hydrogen chloride, chlorine, nitrogen oxides.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 7647-01-0: MW4025000.

CAS# 5341-61-7: MV2298000.

LD50/LC50:

CAS# 7732-18-5:

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

CAS# 7647-01-0:

Inhalation, mouse: LC50 = 1108 ppm/1H

Inhalation, rat: LC50 = 3124 ppm/1H

Oral, rabbit: LD50 = 900 mg/kg.

CAS# 5341-61-7:

No information found

Carcinogenicity:

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

CAS# 7647-01-0: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 5341-61-7: Listed as Class 2 (reasonably anticipated to be a carcinogen) by NTP.

Epidemiology:

Severe eye, skin, mucous membrane irritant; highly neurotoxic, affecting liver and kidneys. Can be absorbed through the skin. Hydrochloric acid is a severe eye, skin, mucous membrane irritant.

Teratogenicity:

No information found



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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: Hydrochloric acid solution

Hazard Class: 8

UN Number: UN1789

Packing Group: PG III

Section 15 - Regulatory Information

US Federal

TSCA:

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

CAS# 7647-01-0 is listed on the TSCA Inventory.

CAS# 5341-61-7 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 7647-01-0: final RQ = 5000 pounds (2270 kg)

CERCLA/SARA Section 313:

This material contains Hydrochloric acid (CAS# 7647-01-0, 1%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:

CAS# 7647-01-0 is considered highly hazardous by OSHA.

US State

State Right to Know:

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

Hydrazine dihydrochloride is listed on the following state Right-to-Know lists: Pennsylvania, Massachusetts.



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California Regulations:

None.

European/International Regulations

Canadian DSL/NDSL:

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

CAS# 7647-01-0 is listed on Canada's DSL List.

CAS# 5341-61-7 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# 7647-01-0 is listed on Canada's Ingredient Disclosure List.

CAS# 5341-61-7 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 23, 1997

Revision Date: June 16, 2010

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