

MATERIAL SAFETY DATA SHEET

Hydrochloric Acid 0.4 Normal

SECTION 1 . Product and Company Identification

Product Name and Synonym: Hydrochloric Acid 0.4 Normal
Product Code: 4180
Material Uses:
Manufacturer: Science Stuff
1104 Newport Ave
Austin, TX 78753
(512) 837-6020
Entry Date : 6/5/2013
Print Date: 6/5/2013
24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

| | | | | |
|-------------------|--------|--------------------|------|---------|
| Health: | 2 | | | |
| Flammability: | 0 | | | |
| Reactivity: | 0 | | | |
| Hazard Rating: | | | | |
| Least | Slight | Moderate | High | Extreme |
| 0 | 1 | 2 | 3 | 4 |
| NA=Not Applicable | | NE=Not Established | | |

SECTION 2 HAZARD IDENTIFICATION

Causes severe irritation and burns. Harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

SECTION 3 MIXTURE COMPONENTS

| SARA 313 | Component | CAS Number | Percent Comp. | Dimension | Exposure Limits |
|-------------------------------------|-------------------------------|----------------|---------------|-----------|---------------------------------------|
| <input checked="" type="checkbox"/> | Hydrochloric Acid | CAS# 7647-01-0 | <5% | V/V | OSHA PEL (C) 5 ppm, (C) 7 mg/mf |
| <input type="checkbox"/> | Water, Deionized ASTM Type II | CAS# 7732-18-5 | Balance | V/V | None Established |

SECTION 4 FIRST AID MEASURES

Causes severe irritation and burns. Harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire
Fire / Explosion Hazards: None Known.

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Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Absorb spill with inert material, then place in a chemical waste container. Neutralize with a weak base.

SECTION 7 HANDLING AND STORAGE

Store in a cool dry place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: None required

Ventilation

Local Exhaust

Mechanical

Protective Gloves: Gloves to prevent skin exposure as rubber or vinyl

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|----------------------|-----------------------------------|-----------------------------|----------------|
| Melting Point: | ~0° C | Percent Volatile by Volume: | >99 |
| Boiling Point: | ~100° C | Evaporation Rate | 1 |
| Vapor Pressure: | Information not available | Evaporation Standard | Water =1 |
| Vapor Density: | Information not available | Auto Ignition Temp | Not applicable |
| Solubility in Water: | Soluble | Lower Flamm. Limit in Air | Not applicable |
| Appearance /Odors: | Clear water white odorless liquid | Upper Flamm. Limit in Air | Not applicable |
| Flash Point: | not flammable | | |
| Specific Gravity: | ~1 | | |

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability: Stable

Conditions to Avoid: Avoid contact with incompatible materials.

Materials to Avoid: Concentrated Acids and Bases, Water reactive materials.

Hazardous Decomposition Products: None

Hazardous polymerization: Will Not Occur

Conditions to Avoid: None known

SECTION 11 Toxicological Information

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SECTION 12 Ecological Information

SECTION 13 Disposal Considerations

SECTION 14 Transport Information

DOT Classification: Hydrochloric Acid Solution, 8, UN1789, PG III

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

SECTION 16 Additional Information

Corrosive! Conditions aggravated/target organs: Persons with preexisting skin, eye or respiratory conditions may be more susceptible. Acute: Severe irritation or burns to skin, eyes, lungs, mucous membranes and GI tract. Skin ulcers, blindness, difficult breathing. Chronic: Dermatitis, eye damage, lung damage.

Flammability

Health

Reactivity

Revisions

NFPA

0.1

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