

# MATERIAL SAFETY DATA SHEET

Hydrochloric Acid 15% v/v Solution

## SECTION 1 . Product and Company Identification

Product Name and Synonym: Hydrochloric Acid 15% v/v Solution

Product Code: 275-07

Material Uses:  
 Manufacturer: OFI Testing Equipment, Inc.  
 11302 Steeplecrest Drive  
 Houston, TX 77065 USA  
 Phone: (713) 880-9885  
 Fax: (713) 880-9886

Entry Date : 5/12/2010

Print Date: 7/31/2010

24 Hour Emergency Assistance : Chemtrec 800-424-9300  
 Canutec 613-996-6666

Health:	3
Flammability:	0
Reactivity:	0
<b>Hazard Rating:</b>	
Least	Slight
Moderate	High
Extreme	
0	1
2	3
4	4
NA = Not Applicable NE = Not Established	

## SECTION 2 HAZARD IDENTIFICATION

Causes severe irritation and burns. May be 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.

Emergency Overview:Poison! Danger! Corrosive. Liquid and mist cause severe burns to all body tissue. May be fatal if swallowed or inhaled.

Inhalation:Corrosive! Inhalation of vapors can cause coughing, choking, inflammation, of the nose, throat, and upper respiratory tract, and in severe cases, pulmonary edema, circulatory failure, and death.

Ingestion:Corrosive! Swallowing hydrochloric acid can cause immediate pain and burns of the mouth, throat, esophagus, and gastrointestinal tract. May cause nausea, vomiting, and diarrhea, and in severe cases, death.

Skin:Corrosive! Can cause redness, pain, and severe skin burns. Concentrated solutions cause deep ulcers and discolor of skin.

Eye Contact:Corrosive! Vapors are irritating and may cause damage to eyes. Contact may cause severe burns and permanent eye damage.

Chronic Exposure:Long-term exposure to concentrated vapors may cause erosion of teeth. Long-term exposures seldom occur due to the corrosive properties of the acid.

Aggravated by Exposure:Persons with pre-existing skin disorders or eye disease may be more susceptible to the effects of this substance.

## SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input checked="" type="checkbox"/>	Hydrochloric Acid	CAS# 7647-01-0	15 - 40%	V/V	OSHA PEL (C) 5 ppm, (C) 7 mg/m <sup>3</sup>
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	Balance	V/V	None Established

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**SECTION 4 FIRST AID MEASURES**

Causes severe irritation and burns. May be 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 irritation persists, 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  
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.  
Ventilate area of Leak or Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Isolate Hazard Area. Keep Unnecessary and Unprotected Personnel from Entering.  
Contain and Recover Liquid when Possible. Neutralize with Alkaline Material (Soda-Ash, Lime), then Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth), and place in a Chemical Waste Container. Do Not Use Combustible Materials, such as Saw Dust. Do Not Flush to Sewer! US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.

**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: Wear appropriate gloves to prevent skin exposure  
Eye Protection: Splash Goggles  
Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

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Melting Point:	Information not available	Percent Volatile by Volume:	> 99%
Boiling Point:	101 - 103°C (214 - 217°F)	Evaporation Rate	Information not available
Vapor Pressure:	not available	Evaporation Standard	
Vapor Density:	not available	Auto Ignition Temp	Not applicable
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	Clear colorless liquid/no odor	Upper Flamm. Limit in Air	Not applicable
Flash Point:	Information not available		
Specific Gravity:	~ 1		

### SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	reactive with strong bases, metals, hydroxides, amines, carbonates
Materials to Avoid:	Halides, ammonia, phosphates, bases
Hazardous Decomposition Products:	HCL Fumes, Chlorine, explosive hydrogen gas
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

### SECTION 11 Toxicological Information

Carcinogenic References: Hydrogen Chloride - IARC Category 3, NTP Carcinogen - Known: No

### SECTION 12 Ecological Information

Environmental Fate:When Released into the Soil, this Material is Not Expected to Biodegrade. When Released into the Soil, this Material may Leach into Groundwater.  
Environmental Toxicity:This material is expected to be toxic to aquatic life.

### SECTION 13 Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

### SECTION 14 Transport Information

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

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

### SECTION 15 Regulatory Information

Chemical Inventory Status –  
Part 1:Ingredient  
Hydrogen Chloride (7647-01-0)  
Water (7732-18-5)  
TSCA Yes YES

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EC Yes YES  
Japan YES YES  
Australia Yes YES

Chemical Inventory Status –  
Part 2:Ingredient  
Hydrogen Chloride (7647-01-0)  
Water (7732-18-5)  
Korea Yes YES  
DSL Yes YES  
NDSL No NO  
Phil. Yes YES

Federal, State & International Regulations –  
Part 1: Ingredient.  
Hydrogen Chloride (7647-01-0)  
Water (7732-18-5)  
RQ 5000 No  
TPQ 500 No  
List YES NO  
Chemical Catg No NO

Federal, State &  
International Regulations –  
Part 2:Ingredient  
Hydrogen Chloride (7647-01-0)  
Water (7732-18-5)  
CERCLA 5000 NO  
261.33 No NO  
8(d) No NO

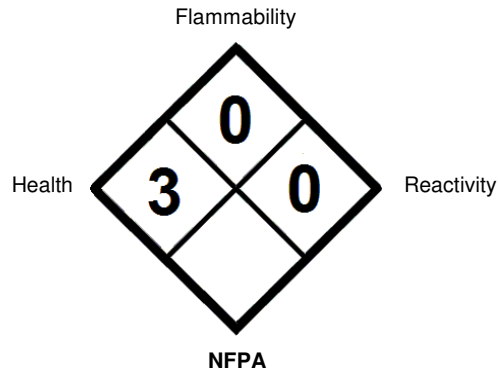
Chemical Weapons Convention: No  
TSCA 12 (b):No  
CDTA: YES MIXTURE/LIQUID  
SARA 311/312: Acute:YES  
Chronic: YES  
Fire: No  
Pressure: No  
Reactivity: No  
Australian Hazchem Code: 2R  
Poison Schedule:NONE ALLOCATED

### SECTION 16

### Additional Information

Overexposure symptoms: Corrosive effects.: Acute-Irritation possible to skin, eyes, lungs, mucous membranes, and GI tract. Chronic-none known. Conditions aggravated/Target organs: Persons with preexisting skin, eye, or respiratory disorders may be more susceptible.

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Revisions

	0	
7/30/2010	0.1	updated msds to 16 section from 10 section msds. STN

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