

SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name: : Hydrochloric Acid 11BE 16%, Muriatic Acid 16%,
 Product Use: : Acidic additive
 Supplier Name and Address: : Corporate Facility Supply
 7 Neilson Street
 St. Catharines, ON L2M 5V9
 Telephone: : (905) 682-8888
 Emergency Telephone: : CANUTEC (613) 996-6666

SECTION 2 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Physical State: Clear, colourless liquid
GHS Classification:
 Skin Irritation: Category 1C
 Eye Irritation: Category 1
 Acute Toxicity: Category 3
GHS Label Elements:
 Hazard Pictograms



Signal Word: Danger
 Hazard Statements: H302+H312 Harmful if swallowed or in contact with skin
 H319 Causes serious eye irritation
 Precautionary Statements: **Prevention**
 P262 Do not get in eyes, on skin, or on clothing
 P280 Wear protective gloves/protective clothing/eye protection
 P284 In case of inadequate ventilation wear respiratory protection
Response
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 P332+P313 If skin irritation persists, get medical attention
 P391 Collect spillage
Potential Health Effects:
 Inhalation : Symptoms of exposure may include: nasal discharge, hoarseness, coughing, chest pain and breathing difficulty. Accumulation of fluid in the lungs (pulmonary edema may occur)
 Skin : Causes burns. Harmful if absorbed through the skin. Symptoms of exposure may include: Redness or discoloration, swelling, itching, burning or blistering of skin. Prolonged or repeated contact may cause skin sensitization
 Eyes : Causes severe eye burns. May cause permanent eye damage. Symptoms of exposure may include: eye

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| Ingestion | irritation, burning sensation, pain, watering and/or change of vision : Causes digestive tract burns. Symptoms of exposure may include: inflammation of mouth, throat, esophagus and/or stomach. Nausea, vomiting, loss of appetite, gastrointestinal irritation and/or diarrhea |
| Aggravated Medical Condition | : None known |
| Symptoms of Overexposure | : None known |

SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS

| Chemical Name | CAS-No. | Concentration [%] |
|-------------------|-----------|-------------------|
| Hydrochloric Acid | 7647-01-0 | 14-18 |

SECTION 4 - FIRST-AID MEASURES

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| General Advice | : Move out of dangerous area Consult a physician Show this Safety Data Sheet to the doctor in attendance |
| Inhalation | : Move victim to fresh air. Give artificial respiration only if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing and no pulse. Obtain medical advice immediately. |
| Skin Contact | : Remove contaminated clothing immediately. Wash exposed areas with copious amounts of running water. May be neutralized with sodium bicarbonate, epsom salts, or vinegar. Call a physician if necessary. |
| Eye Contact | : Flush with running water for 20 minutes lifting the upper and lower eyelids occasionally. Remove contact lenses if present. If irritation persists, get medical attention. |
| Ingestion | : Do not induce vomiting. If victim is alert and not convulsing, give 1-2 glasses of water to dilute material. Immediately contact local poison control centre. Vomiting should be induced under the direction of a physician or a poison control centre. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of liquid. Administer more water if necessary. Immediately transport victim to an emergency facility. |

SECTION 5 - FIRE-FIGHTING MEASURES

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| Suitable extinguishing media | : Water fog, carbon dioxide, dry chemical |
| Specific hazards arising from the chemical | : Oxides of carbon and incomplete combustion products may be formed during combustion |
| Special protective actions for fire-fighters | : None |

Additional advice : None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear appropriate protective equipment. Isolate for 800 meters or 0.5 miles in all directions if tank, rail car, or tank truck is involved in fire. Evacuate downwind areas as conditions warrant to prevent exposure and to allow vapours or fumes to dissipate. Spills may expose downwind areas to toxic or flammable concentrations over considerable distances in some cases

Environmental precautions : Prevent entry into sewers or streams. Dike if needed.

Methods and materials for containment/cleaning up : Eliminate all ignitions sources. Contain spill by diking. If fire potential exists, blanket spill with alcohol type aqueous film-forming foam or use water fog stream to disperse vapours. Neutralize the residue with sodium carbonate or crushed limestone. Absorb with an inert dry material and place in an appropriate waste disposal container.

Additional advice : None

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling : Minimize exposure of this product to skin, respiratory system, and eyes

Conditions for safe storage : Store product in suitable labeled containers. Keep container closed when not in use

Other data : Rinse work area after use. Keep out of reach of children. Avoid contamination of food. Wash hands thoroughly after handling

SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

Control parameters : None available

Engineering Controls : Normal building ventilation is adequate
Ensure that eyewash stations and safety showers are close to the workstation location

Personal Protective Equipment

Eye/face protection : Safety glasses with side shields when there is potential for eye contact. Contact lenses should not be worn

Hand protection : Nitrile or rubber gloves are recommended

Skin protection : Protective coveralls or thick clothing that covers exposed skin

Respiratory protection : Suitable breathing mask if mists or vapors are present

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice
When using do not eat or drink
When using do not smoke
Wash hands before breaks and at the end of the workday

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: : Clear, colourless liquid

Odor: : Strong

Odor Threshold: : Not available

pH: : 1-2

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| Melting point/ freezing point: | : 0 °C |
| Initial boiling point and boiling range: | : 100 °C |
| Flash point: | : >70 °C |
| Evaporation rate: | : Same as water |
| Flammability (solid, gas): | : UEL 16%, LEL 4% |
| Upper/lower flammability or explosive limits: | : Not available |
| Vapour pressure: | : Not available |
| Vapour density: | : Not available |
| Relative density (g/mL): | : 1.0 |
| Water solubility: | : Miscible |
| Solubility in other solvents: | : Not available |
| Partition coefficient: n-octanol/water: | : Not available |
| Auto-ignition temperature: | : Not available |
| Decomposition temperature: | : Not available |
| Viscosity: | : As water |

SECTION 10 - STABILITY AND REACTIVITY

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| Reactivity | : Product is stable |
| Chemical Stability | : Stable under normal conditions |
| Possibility of hazardous reactions | : Hazardous polymerization will not occur |
| Conditions to avoid | : Do not mix with strong acids, oxidizing and reducing agents, chlorine bleach |
| Incompatible materials | : Not available |
| Hazardous decomposition products | : None |

SECTION 11 - TOXICOLOGICAL INFORMATION

Product Information

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| Acute toxicity | : Not available |
| Skin Corrosion/ Irritation | : Not available |
| Serious eye damage/irritation | : Not available |
| Respiratory or skin sensitization | : Not available |
| Germ cell mutagenicity | : Not available |
| Carcinogenicity | : Not available |
| Reproductive toxicity | : Not available |
| STOT-single exposure | : Not available |
| STOT-repeated exposure | : Not available |
| Aspiration hazard | : Not available |

Toxicology Data for Ingredients

Hydrochloric Acid

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| Acute toxicity | : LD50 oral, rabbit: 900 mg/kg LC50 vapour, mouse: 1108 ppm, 1h LC50 vapour, rat: 3124 ppm, 1h LDL/LCL oral, man: 2857 ug/kg LCL inhalation, man: 1300 ppm/ 30min LCL inhalation, rabbit: 4413 ppm/ 30 min |
| Skin irritation | : Very hazardous in case of skin contact (corrosive, irritant, permeator), of ingestion. |
| Eye irritation | : Hazardous in case of eye contact (corrosive) |
| Sensitization | : Not available |

Other

: Acute Potential Health Effects: Skin: Corrosive. Causes severe skin irritation and burns. Eyes: Corrosive. Causes severe eye irritation/conjunctivitis, burns, corneal necrosis. Inhalation: May be fatal if inhaled. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract. Inhalation of hydrochloric acid fumes produces nose, throat, and laryngeal burning, and irritation, pain and inflammation, coughing, sneezing, choking sensation, hoarseness, laryngeal spasms, upper respiratory tract edema, chest pains, as well as headache, and palpitations. Inhalation of high concentrations can result in corrosive burns, necrosis of bronchial epithelium, constriction of the larynx and bronchi, nasespetal perforation, glottal closure, occur, particularly if exposure is prolonged. May affect the liver. Ingestion: May be fatal if swallowed. Causes irritation and burning, ulceration, or perforation of the gastrointestinal tract and resultant peritonitis, gastric hemorrhage and infection. Can also cause nausea, vomiting (with "coffee ground" emesis), diarrhea, thirst, difficulty swallowing, salivation, chills, fever, uneasiness, shock, strictures and stenosis (esophageal, gastric, pyloric). May affect behavior (excitement), the cardiovascular system (weak rapid pulse, tachycardia), respiration (shallow respiration), and urinary system (kidneys- renal failure, nephritis). Acute exposure via inhalation or ingestion can also cause erosion of tooth enamel. Chronic Potential Health Effects: dyspnea, bronchitis. Chemical pneumonitis and pulmonary edema

SECTION 12 - ECOLOGICAL INFORMATION

Product Information:

Toxicity: : Not available
 Persistence and degradability: : Not available
 Bioaccumulative potential: : Not available
 Mobility in soil: : Not available
 Other adverse effects: : Not available

Toxicology Data for Ingredients:

Hydrochloric Acid

Toxicity: : LC50 Not available
 Persistence and degradability: : Not available
 Bioaccumulative potential: : Not available
 Mobility in soil: : Not available
 Other adverse effects: : Not available

SECTION 13 - DISPOSAL CONSIDERATIONS

Product

: Sanitary sewer or dry absorbent if available.
 For large quantities, contact local environmental department or government authorities
 Do not dispose in drains, waterways, or soil
 Do not contaminate ponds, or ditches with chemical or the used container.

SECTION 14 - TRANSPORT INFORMATION

UN Number : UN 1789
UN Proper Shipping Name : Hydrochloric acid solution UNNA 1789
Transport hazard class(es) : 8
Packing group, if applicable : III
Environmental hazards : Not applicable
Special precautions for user : None
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable

SECTION 15 - REGULATORY INFORMATION

No other special information is applicable

SECTION 16 - OTHER INFORMATION

Prepared by: Technical Services
Telephone number: (905) 682-8888

Preparation date: January 2018

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