

## SAFETY DATA SHEET

### HYDROCHLORIC ACID

Revision Date: 02-Oct-2013

Revision Number: 22

#### 1. Product and Company Identification

**Product Name**

**Product Trade Name:** HYDROCHLORIC ACID

**Other Names**

**Synonyms:** None  
**Product Code:** HM000911

**Recommended Use**

**Recommended Use**

Solvent

**Uses Advised Against** No information available

**Company Name, Address and Contact Details**

**Manufacturer/Supplier** Halliburton New Zealand  
1 Paraite Rd,  
Bell Block, New Plymouth  
New Zealand Registration No.: 824207

**E-Mail address:** fdunexchem@halliburton.com

**Emergency Telephone Number** +64-6-7559274

**New Zealand National Poisons Centre** 0800 764 766 (24 hours)

#### 2. Hazard(s) Identification

**Statement of Hazardous Nature**

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulation 2001;  
Classified as dangerous good according to NZS 5433:2012, UN, IMDG or IATA

**Classification**

6.1B (Inhalation) Acutely Toxic Substances  
6.1D (Oral) Acutely Toxic Substances  
6.1D (Dermal) Acutely Toxic Substances  
8.1A Corrosive to metals  
8.2B Corrosive to dermal tissue if exposed for greater than 3 mins  
8.3A Corrosive to ocular tissue  
9.1D Slightly harmful in the aquatic environment  
9.3C Harmful to terrestrial vertebrates

**Hazard and Precautionary Statements**

**Hazard Pictograms**



|                                 |  |
|---------------------------------|--|
| <b>Signal Word</b>              | Danger   |
| <b>Hazard Statements</b>        | H330 - Fatal if inhaled<br>H314 - Causes severe skin burns and eye damage<br>H318 - Causes serious eye damage<br>H302 - Harmful if swallowed<br>H312 - Harmful in contact with skin<br>H290 - May be corrosive to metals<br>H402 - Harmful to aquatic life<br>H433 - Harmful to the terrestrial vertebrates.   |
| <b>Precautionary Statements</b> |  |
| <b>Prevention</b>               | P101 - If medical advice is needed, have product container or label at hand<br>P102 - Keep out of reach of children<br>P103 - Read label before use<br>P104 - Read Safety Data Sheet before use<br>P234 - Keep only in original container<br>P264 - Wash face, hands and any exposed skin thoroughly after handling<br>P270 - Do not eat, drink or smoke when using this product<br>P271 - Use only outdoors or in a well-ventilated area<br>P280 - Wear protective gloves/protective clothing/eye protection/face protection<br>P284 - Wear respiratory protection  |
| <b>Response</b>                 | P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting<br>P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower<br>P363 - Wash contaminated clothing before reuse<br>P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing<br>P310 - Immediately call a POISON CENTER or doctor/physician<br>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing<br>P390 - Absorb spillage to prevent material damage |
| <b>Storage</b>                  | P403 + P233 - Store in a well-ventilated place. Keep container tightly closed<br>P405 - Store locked up  |
| <b>Disposal</b>                 | P501 - Dispose of contents/container to an approved waste disposal plant   |

**Contains**

| Substances        | CAS Number | Substance HSNO Classification   |
|-------------------|------------|---|
| Hydrochloric acid | 7647-01-0  | 6.1B (Inhalation) par 6.1D (Oral)<br>6.1D (Dermal)<br>8.1A<br>8.2B<br>8.3A<br>9.1D (Crustacean, Fish)<br>9.3C |
| Water             | 7732-18-5  | Not applicable  |

**2.3 Other Hazards**

Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen

### 3. Composition and Information on Ingredients

| Substances        | CAS Number | PERCENT (w/w) |
|-------------------|------------|---------------|
| Hydrochloric acid | 7647-01-0  | 30 - 60%      |
| Water             | 7732-18-5  | 60 - 100%     |

### 4. First-Aid Measures

**Requirements for First Aid or Medical Care**

|                   |   |
|-------------------|---|
| <b>Inhalation</b> | If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.         |
| <b>Eyes</b>       | In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.             |
| <b>Skin</b>       | In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse. |
| <b>Ingestion</b>  | Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.                      |

**Workplace Facilities Required**

None

**Relation to Health Effect****Most Important Symptoms/Effects**

May cause eye, skin, and respiratory burns. May cause burns to the mouth, throat, and stomach.

**Medical Attention and Special Treatment****Notes to Physician**

Treat symptomatically

## 5. Fire-Fighting Measures

**Type of Hazard****Flammability Hazard**

Reaction with steel and certain other metals generates flammable hydrogen gas.

**5.1 Extinguishing media****Suitable Extinguishing Media**

Water fog, carbon dioxide, foam, dry chemical.

**Extinguishing media which must not be used for safety reasons**

None known.

**HAZCHEM Code****Hazchem Code:** 2R**Special Protective Equipment and Precautions for Fire Fighters****Special Protective Equipment for Fire-Fighters**

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**Special Exposure Hazards**

May form explosive mixtures with strong alkalis. Decomposition in fire may produce toxic gases. Reaction with steel and certain other metals generates flammable hydrogen gas. Do not allow runoff to enter waterways.

## 6. Spillage, Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Use appropriate protective equipment.

See Section 12 for additional information

**6.2 Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

**6.3 Methods and material for containment and cleaning up**

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Neutralize to pH of 6-8. Scoop up and remove.

**6.4 Reference to other sections**

See Section 12 for additional information.

## 7. Handling and Storage

**7.1 Precautions for Safe Handling**

**Handling Precautions**

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

**Handling Practices****Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

**Approved Handlers**

This product does NOT require an approved handler.

**7.2 Conditions for safe storage, including any incompatibilities**

Store away from alkalis. Store in a cool well ventilated area. Keep container closed when not in use. Store locked up. Product has a shelf life of 24 months.

**Store Site Requirements**

No special controls required

**Packaging**

No special packaging required

## 8. Exposure Controls and Personal Protection

**Workplace Exposure Standards****Exposure Limits**

| Substances        | CAS Number | New Zealand WES | ACGIH TLV-TWA  |
|-------------------|------------|-----------------|----------------|
| Hydrochloric acid | 7647-01-0  | Not applicable  | 2 ppm          |
| Water             | 7732-18-5  | Not applicable  | Not applicable |

**Engineering Controls****Engineering Controls**

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

**Personal Protective Equipment (PPE)****Respiratory Protection**

Acid gas respirator.

**Hand Protection**

Impervious rubber gloves.

**Skin Protection**

Full protective chemical resistant clothing. Rubber boots.

**Eye Protection**

Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions**

Eyewash fountains and safety showers must be easily accessible.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

## 9. Physical and Chemical Properties

**9.1 Information on basic physical and chemical properties**

**Physical State:** Liquid

**Color:** Clear colorless

**Odor:** Pungent acrid

**Odor Threshold:** No information available

Property

Values

Remarks/ - Method

**pH:**

0.8

**Freezing Point/Range**

-46 °C

**Melting Point/Range**

No data available

**Boiling Point/Range**

110 °C

**Flash Point**

No data available

**Evaporation rate**

No data available

**Vapor Pressure**

26 mm/Hg

**Vapor Density**

No data available

**Specific Gravity**

1.18

**Water Solubility**

Soluble in water

**Solubility in other solvents**

No data available

**Partition coefficient: n-octanol/water**

No data available

**Autoignition Temperature**

No data available

|                                  |                          |
|----------------------------------|--------------------------|
| <b>Decomposition Temperature</b> | No data available        |
| <b>Viscosity</b>                 | No data available        |
| <b>Explosive Properties</b>      | No information available |
| <b>Oxidizing Properties</b>      | No information available |

**9.2 Other information**

|                        |                   |
|------------------------|-------------------|
| <b>VOC Content (%)</b> | No data available |
|------------------------|-------------------|

## 10. Stability and Reactivity

**10.2 Chemical Stability**

Stable

**10.4 Conditions to Avoid**

None anticipated

**10.5 Incompatible Materials**

Strong alkalis.

**10.6 Hazardous Decomposition Products**

Flammable hydrogen gas. Chlorine. Hydrogen sulfide.

**Hazardous Reactions****Hazardous Polymerization:** Will Not Occur

## 11. Toxicological Information

**Health Effect from Likely Routes of Exposure****Acute Toxicity****Product Information**

Under certain conditions of use, some of the product ingredients may cause the following:

**Inhalation**

Causes severe respiratory irritation.

**Eye Contact**

May cause eye burns.

**Skin Contact**

May cause skin burns. Did not cause sensitization on laboratory animals (guinea pig)

**Ingestion**

Causes burns of the mouth, throat and stomach.

**Chronic Effects/Carcinogenicity**

Prolonged, excessive exposure may cause erosion of the teeth.

**Toxicity Data****Toxicology data for the components**

| Substances        | CAS Number | LD50 Oral                              | LD50 Dermal   | LC50 Inhalation   |
|-------------------|------------|--|---|---|
| Hydrochloric acid | 7647-01-0  | 700 mg/kg (Rat)<br>238-277 mg/kg (Rat) | 5010 mg/kg (Rabbit)<br>>5010 mg/kg (Rabbit)<br>1449 mg/kg (Mouse) | 3124 ppm (Rat) 1 h<br>3.2 mg/L (Mouse)<br>8.3 mg/L (aerosol)<br>1405 ppm (Rat)<br>554 ppm (Mouse) |
| Water             | 7732-18-5  | 90 mL/kg (Rat)                         | No data available   | No data available   |

## 12. Ecological Information

**12.1 Toxicity****Ecotoxicity Effects****Product Ecotoxicity Data**

No data available

**Substance Ecotoxicity Data**

| Substances        | CAS Number | Toxicity to Algae                           | Toxicity to Fish   | Toxicity to Microorganisms | Daphnia Magna (Water Flea)           |
|-------------------|------------|---|--|----------------------------|--------------------------------------|
| Hydrochloric acid | 7647-01-0  | EC50: 4.7 (pH)<br>(Chlorella vulgaris) 72 h | LC50: 282 mg/L<br>(Gambusia affinis)<br>LC50: 20.5 mg/L<br>(Lepomis macrochirus)<br>LC50: 3.25 – 3.5 (pH)<br>(Lepomis macrochirus)<br>96 h | No information available   | EC50: 4.9 (pH) (Daphnia magna) 48 h  |
| Water             | 7732-18-5  | No information available                    | No information available   | No information available   | EC50: 0.0006 mg/L<br>(Daphnia magna) |

**12.2 Persistence and degradability**

The methods for determining biodegradability are not applicable to inorganic substances.

**12.3 Bioaccumulative potential**

Does not bioaccumulate

**12.4 Mobility in soil**

No information available

**Ecotoxicity Hazard Statements**

Harmful to aquatic life

Harmful to terrestrial vertebrates.

**12.6 Other adverse effects****Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

**13. Disposal Considerations****13.1 Waste treatment methods****Disposal Method**

Disposal should be made in accordance with federal, state, and local regulations. Substance should NOT be deposited into a sewage facility.

**Contaminated Packaging**

Follow all applicable national or local regulations. Contaminated packaging may be disposed of by: rendering packaging incapable of containing any substance, or treating packaging to remove residual contents, or treating packaging to make sure the residual contents are no longer hazardous, or by disposing of packaging into commercial waste collection.

**14. Transport Information****IMDG/IMO**

**UN Number:** UN1789,  
**UN Proper Shipping Name:** Hydrochloric Acid Solution  
**Transport Hazard Class(es):** , 8  
**Packing Group:** , II  
**EMS:** EmS F-A, S-B

**NZ 5433.1999**

**UN Number:** UN1789,  
**UN Proper Shipping Name:** Hydrochloric Acid Solution  
**Transport Hazard Class(es):** , 8  
**Packing Group:** , II

**IATA/ICAO**

**UN Number:** UN1789,  
**UN Proper Shipping Name:** Hydrochloric Acid Solution  
**Transport Hazard Class(es):** , 8  
**Packing Group:** , II

**Special Precautions for User** None

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**15. Regulatory Information**

|   |   |
|---|---|
| <b>New Zealand Inventory of Chemicals</b> | All components listed on inventory or are exempt.   |
| <b>HSNO Approval Number</b>               | HSR004090   |
| <b>Group Name</b>                         | Not Applicable  |
| <b>HSNO Controls</b>                      | Refer to the NZ EPA website for more information: <a href="http://www.epa.govt.nz">http://www.epa.govt.nz</a> |
| <b>Approved Handlers</b>                  | Not Applicable  |
| <b>Poisons Schedule:</b>                  | S6  |

**16. Other information, including date of preparation or last revision**

**The following sections have been revised since the last issue of this SDS**  
Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

**Key literature references and sources for data**  
[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)  
NZ CCID

**Revision Date:** 02-Oct-2013  
**Revision Note**  
Not applicable

**Disclaimer Statement**

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**End of Safety Data Sheet**