

## MATERIAL SAFETY DATA SHEET

**Product Trade Name:** HYDROCHLORIC ACID - 35%

**Revision Date:** 01-Feb-2012

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Statement of Hazardous Nature** Hazardous according to the criteria of NOHSC, Dangerous Goods according to the criteria of ADG.

**Manufacturer/Supplier** Halliburton Australia Pty. Ltd.  
53-55 Bannister Road  
Canning Vale  
WA 6155  
Australia

ACN Number: 009 000 775  
Telephone Number: 61 (08) 9455 8300  
Fax Number: 61 (08) 9455 5300

**Product Emergency Telephone**  
Australia: 08-64244950  
Papua New Guinea: 05 1 281 575 5000  
NewZealand: 06-7559274

**Fire, Police & Ambulance - Emergency Telephone**  
Australia: 000  
Papua New Guinea: 000  
New Zealand: 111

**Identification of Substances or Preparation**

**Product Trade Name:** HYDROCHLORIC ACID - 35%  
**Synonyms:** None  
**Chemical Family:** Inorganic acid  
**UN Number:** , UN1789  
**Dangerous Goods Class:** None  
**Subsidiary Risk:** None  
**Hazchem Code:** None  
**Poisons Schedule:** None  
**Application:** Solvent

**Prepared By** Chemical Compliance  
Telephone: 1-580-251-4335  
e-mail: fdunexchem@halliburton.com

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances	CAS Number	PERCENT	Australia NOHSC	New Zealand OEL	ACGIH TLV-TWA
Hydrochloric acid	7647-01-0	30 - 60%	5 ppm	Not applicable	2 ppm

## Non-Hazardous Substance to Total of 100%

### 3. HAZARDS IDENTIFICATION

<b>Hazard Overview</b>	May cause eye, skin, and respiratory burns. May be harmful if swallowed.
<b>Risk Phrases</b>	R34 Causes burns. R37 Irritating to respiratory system.
<b>HSNO Classification</b>	6.1B Acutely Toxic Substances 8.1A Substances that are corrosive to metals. 8.2B Substances that are corrosive to dermal tissue if exposed for greater than 3 mins. 8.3A Substances that are corrosive to ocular tissue, 9.1D Substances that are slightly harmful in the aquatic environment. 9.3C Substances that are harmful to terrestrial vertebrates.

### 4. FIRST AID MEASURES

<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>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. Remove contaminated shoes and discard.
<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>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.
<b>Notes to Physician</b>	Not Applicable

### 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Water fog, carbon dioxide, foam, dry chemical.
<b>Extinguishing media which must not be used for safety reasons</b>	None known.
<b>Special Exposure Hazards</b>	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.
<b>Special Protective Equipment for Fire-Fighters</b>	Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautionary Measures</b>	Use appropriate protective equipment.
<b>Environmental Precautionary Measures</b>	Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption**

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.

**7. HANDLING AND STORAGE**

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

**Storage Information** Store away from alkalis. Store in a cool well ventilated area. Keep container closed when not in use.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

**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.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Color:</b>	Clear colorless
<b>Odor:</b>	Pungent
<b>pH:</b>	1
<b>Specific Gravity @ 20 C (Water=1):</b>	1.152
<b>Density @ 20 C (kg/l):</b>	1.152
<b>Bulk Density @ 20 C (kg/m<sup>3</sup>):</b>	Not Determined
<b>Boiling Point/Range (C):</b>	Not Determined
<b>Freezing Point/Range (C):</b>	Not Determined
<b>Pour Point/Range (C):</b>	Not Determined
<b>Flash Point/Range (C):</b>	Not Determined
<b>Flash Point Method:</b>	Not Determined
<b>Autoignition Temperature (C):</b>	Not Determined
<b>Flammability Limits in Air - Lower (g/m<sup>3</sup>):</b>	Not Determined
<b>Flammability Limits in Air - Lower (%):</b>	Not Determined
<b>Flammability Limits in Air - Upper (g/m<sup>3</sup>):</b>	Not Determined
<b>Flammability Limits in Air - Upper (%):</b>	Not Determined
<b>Vapor Pressure @ 20 C (mmHg):</b>	75
<b>Vapor Density (Air=1):</b>	Not Determined
<b>Percent Volatiles:</b>	Not Determined
<b>Evaporation Rate (Butyl Acetate=1):</b>	Not Determined
<b>Solubility in Water (g/100ml):</b>	Soluble
<b>Solubility in Solvents (g/100ml):</b>	Not Determined
<b>VOCs (g/l):</b>	Not Determined
<b>Viscosity, Dynamic @ 20 C (centipoise):</b>	Not Determined
<b>Viscosity, Kinematic @ 20 C (centistokes):</b>	Not Determined
<b>Partition Coefficient/n-Octanol/Water:</b>	Not Determined
<b>Molecular Weight (g/mole):</b>	Not Determined
<b>Decomposition Temperature (C):</b>	Not Determined

## 10. STABILITY AND REACTIVITY

<b>Stability Data:</b>	Stable
<b>Hazardous Polymerization:</b>	Will Not Occur
<b>Conditions to Avoid</b>	None anticipated
<b>Incompatibility (Materials to Avoid)</b>	Strong alkalis.
<b>Hazardous Decomposition Products</b>	Flammable hydrogen gas. Chlorine. Hydrogen sulfide.
<b>Additional Guidelines</b>	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

<b>Principle Route of Exposure</b>	Eye or skin contact, inhalation.
<b>Inhalation</b>	Causes severe respiratory burns. May cause lungs to fill with fluids.
<b>Skin Contact</b>	Causes severe burns.
<b>Eye Contact</b>	May cause eye burns.
<b>Ingestion</b>	Causes burns of the mouth, throat and stomach.
<b>Aggravated Medical Conditions</b>	Skin disorders. Lung disorders.
<b>Chronic Effects/Carcinogenicity</b>	Prolonged, excessive exposure may cause erosion of the teeth.
<b>Other Information</b>	None known.
<b>Toxicity Tests</b>	
<b>Oral Toxicity:</b>	Not determined
<b>Dermal Toxicity:</b>	Not determined
<b>Inhalation Toxicity:</b>	Not determined
<b>Primary Irritation Effect:</b>	Not determined
<b>Carcinogenicity</b>	Not determined
<b>Genotoxicity:</b>	Not determined
<b>Reproductive / Developmental Toxicity:</b>	Not determined

## 12. ECOLOGICAL INFORMATION

<b>Mobility (Water/Soil/Air)</b>	Not determined
<b>Persistence/Degradability</b>	Not determined
<b>Bio-accumulation</b>	Not determined

### Ecotoxicological Information

<b>Acute Fish Toxicity:</b>	Not determined
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**Acute Crustaceans Toxicity:** Not determined  
**Acute Algae Toxicity:** Not determined

**Chemical Fate Information** Not determined

**Other Information** Not applicable

### 13. DISPOSAL CONSIDERATIONS

**Disposal Method** Disposal should be made in accordance with federal, state, and local regulations.

**Contaminated Packaging** Follow all applicable national or local regulations.

### 14. TRANSPORT INFORMATION

#### Land Transportation

##### ADR

UN1789, Hydrochloric Acid Solution, 8, II

#### Air Transportation

##### ICAO/IATA

UN1789, Hydrochloric Acid Solution, 8, IIRQ (Hydrochloric Acid - 2273 kg.)

#### Sea Transportation

##### IMDG

UN1789, Hydrochloric Acid Solution, 8, IIRQ (Hydrochloric Acid - 2273 kg.)  
EmS F-A, S-B

#### Other Transportation Information

**Labels:** Corrosive

### 15. REGULATORY INFORMATION

#### Chemical Inventories

**Australian AICS Inventory** All components listed on inventory or are exempt.  
**US TSCA Inventory** All components listed on inventory or are exempt.  
**EINECS Inventory** This product, and all its components, complies with EINECS

**Classification** C - Corrosive.

**Risk Phrases** R34 Causes burns.  
R37 Irritating to respiratory system.

**Safety Phrases**

S23 Do not breathe gas, fumes, vapour or spray.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S45 In case of accident or if you feel unwell, seek medical advice immediately.  
S1/2 Keep locked up and out of reach of children.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

**16. OTHER INFORMATION**

The following sections have been revised since the last issue of this MSDS

Not applicable

**Contact****Australian Poisons Information Centre**

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

**New Zealand National Poisons Centre**

0800 764 766

**Additional Information**

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

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

**Disclaimer Statement**

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**\*\*\*END OF MSDS\*\*\***