

MATERIAL SAFETY DATA SHEET

Product Trade Name: HYDROCHLORIC ACID 10-30%

Revision Date: 19-Apr-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.
15 Marriott Road
Jandakot
WA 6164
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 10-30%
Synonyms: None
Chemical Family: Inorganic acid
UN Number: , UN1789
Dangerous Goods Class: 8
Subsidiary Risk: None
Hazchem Code: 2R
Poisons Schedule: S6
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 WES | ACGIH TLV-TWA |
|-------------------|------------|----------|--------------------|--------------------|---------------|
| Hydrochloric acid | 7647-01-0 | 10 - 30% | 5 ppm | Not applicable | 2 ppm |

Non-Hazardous Substance to Total of 100%

3. HAZARDS IDENTIFICATION

| | |
|----------------------------|--|
| Hazard Overview | May cause eye, skin, and respiratory burns. May be harmful if swallowed. |
| Risk Phrases | R34 Causes burns. R37 Irritating to respiratory system. |
| HSNO Classification | Not Determined |

4. FIRST AID MEASURES

| | |
|---------------------------|---|
| Inhalation | 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. |
| Skin | 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. |
| Eyes | 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. |
| Ingestion | 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. |
| Notes to Physician | Not Applicable |

5. FIRE FIGHTING MEASURES

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

6. ACCIDENTAL RELEASE MEASURES

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|---|---|
| Personal Precautionary Measures | Use appropriate protective equipment. |
| Environmental Precautionary Measures | 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

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|-------------------------------|--|
| 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

| | |
|--|-----------------|
| Physical State: | Liquid |
| Color: | Clear colorless |
| Odor: | Pungent acrid |
| pH: | 0.8 |
| Specific Gravity @ 20 C (Water=1): | 1.16 |
| Density @ 20 C (kg/l): | 1.16 |
| Bulk Density @ 20 C (kg/m³): | Not Determined |
| Boiling Point/Range (C): | 110 |
| Freezing Point/Range (C): | -46 |
| Pour Point/Range (C): | Not Determined |
| Flash Point/Range (C): | Not Determined |
| Flash Point Method: | Not Determined |
| Autoignition Temperature (C): | Not Determined |
| Flammability Limits in Air - Lower (g/m³): | Not Determined |
| Flammability Limits in Air - Lower (%): | Not Determined |
| Flammability Limits in Air - Upper (g/m³): | Not Determined |
| Flammability Limits in Air - Upper (%): | Not Determined |
| Vapor Pressure @ 20 C (mmHg): | 26 |
| Vapor Density (Air=1): | Not Determined |
| Percent Volatiles: | 35 |
| Evaporation Rate (Butyl Acetate=1): | Not Determined |
| Solubility in Water (g/100ml): | Soluble |
| Solubility in Solvents (g/100ml): | Not Determined |
| VOCs (g/l): | Not Determined |
| Viscosity, Dynamic @ 20 C (centipoise): | Not Determined |
| Viscosity, Kinematic @ 20 C (centistokes): | Not Determined |
| Partition Coefficient/n-Octanol/Water: | Not Determined |
| Molecular Weight (g/mole): | 36.5 |
| Decomposition Temperature (C): | Not Determined |

10. STABILITY AND REACTIVITY

| | |
|----------------------------------|------------------|
| Stability Data: | Stable |
| Hazardous Polymerization: | Will Not Occur |
| Conditions to Avoid | None anticipated |

| | |
|---|---|
| Incompatibility (Materials to Avoid) | Strong alkalis. |
| Hazardous Decomposition Products | Flammable hydrogen gas. Chlorine. Hydrogen sulfide. |
| Additional Guidelines | Not Applicable |

11. TOXICOLOGICAL INFORMATION

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|---|---|
| Principle Route of Exposure | Eye or skin contact, inhalation. |
| Symptoms related to exposure | |
| Inhalation | Causes severe respiratory irritation. |
| Skin Contact | May cause skin burns. |
| Eye Contact | May cause eye burns. |
| Ingestion | Causes burns of the mouth, throat and stomach. |
| Aggravated Medical Conditions | Skin disorders. |
| Chronic Effects/Carcinogenicity | Prolonged, excessive exposure may cause erosion of the teeth. |
| Other Information | None known. |
| Toxicity Tests | |
| Oral Toxicity: | Not determined |
| Dermal Toxicity: | Not determined |
| Inhalation Toxicity: | LC50: 3124 ppm/1 hr. (Rat) |
| Primary Irritation Effect: | Not determined |
| Carcinogenicity | Not determined |
| Genotoxicity: | Not determined |
| Reproductive / Developmental Toxicity: | Not determined |

12. ECOLOGICAL INFORMATION

| | |
|----------------------------------|----------------|
| Mobility (Water/Soil/Air) | Not determined |
| Persistence/Degradability | Not determined |
| Bio-accumulation | Not determined |

Ecotoxicological Information

| | |
|------------------------------------|----------------|
| Acute Fish Toxicity: | Not determined |
| Acute Crustaceans Toxicity: | Not determined |
| Acute Algae Toxicity: | Not determined |
| Chemical Fate Information | Not determined |
| Other Information | Not applicable |

13. DISPOSAL CONSIDERATIONS

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| 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. |
| New Zealand Inventory of Chemicals | 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 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 SDS

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 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*****