

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: HYDROCHLORIC ACID 33%
OTHER NAMES: HYDROCHLORIC ACID, HYDRO ACID
RECOMMENDED USE: General chemical - Acid
SUPPLIER NAME: CAMPBELL CLEANTEC (ABN 92 009 657 489)
ADDRESS: 32 PERIVALE STREET, DARRA, QLD, 4076
TELEPHONE: GENERAL + 61 7 3710 3200
ENQUIRIES:
CUSTOMER SERVICE: 1800 077 240
FAX: GENERAL + 61 7 3710 3210
ENQUIRIES:
CUSTOMER SERVICE: + 61 7 3710 3207
EMERGENCY TELEPHONE NUMBER: AUSTRALIA: **1800 628 724 (ALL HOURS)**
INTERNATIONAL: + 61 7 3710 3184 (ALL HOURS)

2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION: Classified as **hazardous** according to the criteria of NOHSC.
 Classified as a **dangerous good UN 1789** according to the criteria of ADG Code (see section 14).
 Classified as **schedule 6** according to the criteria of SUSDP (see section 15).
HAZARD CATEGORY: C – Corrosive
 Xi – Irritant
RISK PHRASES: R35 – Causes severe burns.
 R37 – Irritating to respiratory system.
 R41 – Risk of serious eye damage.
SAFETY PHRASES: S1/2 – Keep locked up and out of the reach of children.
 S7/9 – Keep container tightly closed and in a well-ventilated place.
 S23 – Do not breathe fumes, vapour or spray.
 S24/25 – Avoid contact with skin and eyes.
 S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.
 S45 – In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

The information contained in this MSDS is specific to the product when handled and used neat. This product when diluted may not require the same control measures as the neat product. Check with your technical representative if in doubt.

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS No.	PROPORTION (% w/w)
<i>The ingredients below are considered either hazardous, dangerous goods or poison scheduled according to the criteria of NOHSC, ADG Code and SUSDP (respectively) at the levels used in the product.</i>		
Hydrochloric Acid	7647-01-0	30 – 60%
<i>The ingredients below are not considered either hazardous, dangerous goods or poison scheduled according to the criteria of NOHSC, ADG Code and SUSDP (respectively) at the levels used in the product.</i>		
water		> 60%

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4. FIRST AID MEASURES

INGESTION:	For advice, contact a Poisons Information Centre (Phone Australia 131126, New Zealand 0800 764 766) or a doctor. If swallowed, do NOT induce vomiting.
EYE CONTACT:	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
SKIN CONTACT:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor.
INHALATION:	Remove from source of exposure to fresh air. Seek medical assistance if the effects persist. ** SHOW THIS SAFETY DATA SHEET TO A DOCTOR **
FIRST AID FACILITIES:	Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers.
NOTES TO PHYSICIAN:	Treat symptomatically and as for strongly acidic corrosive material. Can cause corneal burns.

5. FIRE FIGHTING METHODS

SUITABLE EXTINGUISHING MEDIA:	Water spray, foam, carbon dioxide or dry chemical powder.
HAZARDS FROM COMBUSTION:	The product is non-combustible; however, the packaging material may burn to emit noxious fumes. Contact with metals may liberate hydrogen gas which is extremely flammable.
PRECAUTIONS FOR FIRE FIGHTERS AND SPECIAL PROTECTIVE EQUIPMENT:	Fire fighters should wear self-contained breathing apparatus and acid-resistant chemical splash unit to minimise risk of exposure.
HAZCHEM CODE:	2R

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES:	Spillages are slippery. Ensure adequate ventilation, work up wind or increase ventilation. Keep spectators away – rope off the area. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and inhalation of vapours.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:	Contain the spill and prevent run off into confined areas, drains and waterways. Vapour-suppressing foam may be used to control vapours. Absorb with dry earth, sand or other non-combustible material. Neutralise with lime or soda ash. Use clean, non-sparking tools to collect and seal in properly labelled drums for disposal in an area approved by local authority by-laws. Wash area down with excess water to remove residual material. Incineration of disposed material is not recommended, as it is unlikely to adequately burn.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:	Keep containers closed at all times - check regularly for leaks or spills. Transport and store upright. Addition to water releases heat which can result in violent boiling and splattering. Always add slowly and in small amounts. Never add water to acids - always add acids to water. Avoid eye contact and repeated or prolonged skin contact and breathing in vapour, mists and aerosols. Do not eat, drink or smoke in contaminated areas. Always remove contaminated clothing and wash hands before eating, drinking, smoking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.
CONDITIONS FOR SAFE STORAGE:	Store in the original container, in a cool, dry, well-ventilated area out of sunlight and away from incompatible materials and foodstuffs. Keep containers closed when not in use to ensure contamination does not occur- check regularly for leaks. Do not combine part drums of the same product, as this may be a source of contamination. Do not mix with other chemicals. This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS:	No value assigned for this specific material by NOHSC, however as published by NOHSC: T.W.A. for Hydrochloric Acid = 7.5 mg/m ³ (5ppm) Peak Limitation
BIOLOGICAL LIMIT VALUES:	No biological limit allocated.
ENGINEERING CONTROLS:	Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. If inhalation risk exists then use with local exhaust ventilation or while wearing a suitable respirator. Keep containers closed when not in use.

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PERSONAL PROTECTIVE EQUIPMENT:

Protective equipment must be worn at all times. Risk assessments should always be conducted to identify the hazards and in turn determine the appropriate personal protective equipment for the hazard.

Protective gloves: elbow-length laminate film, natural rubber, nitrile, neoprene, neoprene/natural rubber blend or PVC impervious gloves. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information.

Eye protection: safety glasses/goggles with side shield protection and/or full-face shield. Consult AS/NZS 1336 and AS/NZS 1337 for further information.

Clothing and footwear: waterproof apron, coveralls, trousers, long sleeved shirt, closed in shoes and/or safety footwear. Consult AS/NZS 2210 and AS/NZS 2919 for further information.

Respiratory Protection: Avoid breathing mist, sprays or vapours. Where ventilation is not adequate, respiratory protection may be required. Any air-purifying respirator with an acid gas filters or any chemical cartridge respirator with an acid gas cartridge(s) providing protection against the compound of concern meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Clear, colourless, mobile, fuming liquid.
ODOUR:	Odour of Hydrogen Chloride Gas.
PH (NEAT):	<1
SPECIFIC GRAVITY OR DENSITY:	1.16
VAPOUR PRESSURE:	No information available.
PERCENT VOLATILES:	No information available.
BOILING POINT / RANGE:	No information available.
FREEZING / MELTING POINT:	No information available.
SOLUBILITY:	The product is water based and is fully soluble in water.
FLASH POINT:	No known fire hazard.
FLAMMABILITY LIMITS:	No information available.
IGNITION TEMPERATURE:	No information available.
SHELF LIFE:	2 years from manufacturing date (when stored as directed).
OTHER:	None.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable under normal conditions of use. The shelf life is 2 years.
CONDITIONS TO AVOID:	Do not combine part drums of the same product, as this may be a source of contamination.
INCOMPATIBLE MATERIALS:	Chlorine containing products, alkalis, organic materials, aluminium, tin or zinc coated metals.
HAZARDOUS DECOMPOSITION PRODUCTS:	The packaging material may burn to emit noxious fumes.
HAZARDOUS REACTIONS:	Reacts violently with alkalis. Reacts exothermically on dilution with water. Reacts with chlorine products and oxidising agents liberating toxic chlorine gas. Corrosive to many metals with the liberation of extremely flammable hydrogen gas.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

ACUTE EFFECTS

INGESTION:	Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.
EYE CONTACT:	Highly corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
SKIN CONTACT:	Highly corrosive to skin - may cause skin burns.
INHALATION:	Breathing in mists or aerosols may produce respiratory irritation.
LONG TERM EFFECTS:	No information available.

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ACUTE TOXICITY / CHRONIC TOXICITY: No toxicity data for this specific product, however toxicity data for the hazardous ingredient is listed below.
TOXICITY DATA FOR HYDROCHLORIC ACID:
Oral LD₅₀ (rat) 900 mg/kg
Inhalation LC₅₀ (rat) 3124 ppm/1h Inhalation LC₅₀ (mouse) 1108 ppm/1h

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Avoid contaminating waterways. The product is highly acidic. If large spills occurred a water pH drop could be responsible for an environmental effect on aquatic organisms.
ECOTOXICITY DATA FOR HYDROCHLORIC ACID:
LC₅₀ Mosquito fish (female) 282 mg/L/24hr
LC₅₀ Shore Crab 240 mg/L/48hr LC₅₀ Sand shrimp 260 mg/L/48hr

PERSISTENCE AND DEGRADABILITY: Not relevant.
MOBILITY: No information available.
OTHER: None.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Empty containers should be forwarded to an approved agent for recycling. Avoid unauthorised discharge to sewer.

SPECIAL PRECAUTIONS FOR LANDFILL OR INCINERATION: The product is suitable for disposal by landfill through an approved agent. Incineration of the product is not recommended, as it is unlikely to adequately burn.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT: Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.

UN NUMBER: 1789
UN PROPER SHIPPING NAME: HYDROCHLORIC ACID
CLASS AND SUBSIDIARY RISK(S): 8
PACKAGING GROUP: II
HAZCHEM CODE: 2R
INITIAL EMERGENCY RESPONSE GUIDE: Guide 40
SEGREGATION DANGEROUS GOODS: Not to be loaded with explosives (class 1), dangerous when wet substances (class 4.3), oxidising agents (class 5.1), organic peroxides (class 5.2), radioactive substances (class 7), corrosives (strong alkalis of class 8), foodstuffs and foodstuff empties, however exemptions may apply.

MARINE TRANSPORT: Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN NUMBER: 1789
UN PROPER SHIPPING NAME: HYDROCHLORIC ACID
CLASS AND SUBSIDIARY RISK(S): 8
PACKAGING GROUP: II
STOWAGE AND SEGREGATION: Category C

AIR TRANSPORT: Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) for transport by air.

UN NUMBER: 1789
UN PROPER SHIPPING NAME: HYDROCHLORIC ACID
CLASS AND SUBSIDIARY RISK(S): 8
PACKAGING GROUP: II
ERG CODE: 8L

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15. REGULATORY INFORMATION

POISONS SCHEDULE (AUST.): 6
APVMA STATUS: Not relevant.
TGA STATUS: Not relevant.
AICS STATUS: All the constituents of this product are listed.
AQIS STATUS: Not relevant.
OTHER: None.

16. OTHER INFORMATION

GENERAL INFORMATION: The product is highly acidic. Use good industrial hygiene.
MSDS ISSUE NUMBER: 003
MSDS ISSUE DATE: 15 JUNE 2006
In any event, the review and, if necessary, the re-issue of a MSDS shall be no longer than 5 years after the last date of issue.
Electronic versions of the MSDS's in a PDF format are also available on our Website at www.cleantec.com.au/product.asp
REASON(S) FOR ISSUE: Update to conform to requirements of NOHSC:2011(2003); 16-header format.
THIS ISSUE NUMBER REPLACES ALL PREVIOUS ISSUES.

LITERARY REFERENCE:

SOURCES FOR DATA:

LEGEND:	
AICS	Australian Inventory of Chemical Substances
APVMA	Australian Pesticides and Veterinary Medicines Authority
AQIS	Australian Quarantine and Inspection Service
AS	Australian Standard (as issued by Standards Australia)
ERP Code	Emergency Response Drill Code as found in the ICAO (International Civil Aviation Organisation) Doc 9481
MSDS	Material Safety Data Sheet
NOHSC	National Occupational Health and Safety Commission
STEL	Short Term Exposure Limit - A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TGA	Therapeutic Goods Administration
TLV	Threshold Limit Value - TLV is a proprietary name registered by the American Conference of Governmental Industrial Hygienists (ACGIH) and refers to airborne concentrations of substances or levels of physical agents to which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect.
TWA	Time Weighted Average - The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

This MSDS has been prepared from current technical data and summarises at the date of issue our best knowledge of the health and safety information of the product, and in particular how to safely handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

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End of MSDS