

Material Safety Data Sheet

HYDROCHLORIC ACID 36%

Infosafe™ No. JXFKN Issue Date November 2007 Status ISSUED by AJAXFC BS: 1.9.46

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name HYDROCHLORIC ACID 36%

Product Code 1367

Company Name Ajax Finechem (ABN 64 121 927 786)

Address 17/21 Bay Road Taren Point
NSW 2229

Emergency Tel. 1800 638 556 (24 hr) Aust / (NZ): 0800 154 666

Telephone/Fax Number Tel: 1300 884 078

Recommended Use Production of chlorides, boiler scale removal, laboratory reagent, general purpose food additive and used for pickling and cleaning metals.

Other Names	Name	Product Code
	HYDROCHLORIC ACID 32%	256
	HYDROCHLORIC ACID 32%	2578
	HYDROCHLORIC ACID 36%	10965
	HYDROCHLORIC ACID RECOVERED, LOW ASSAY	1370
	HYDROCHLORIC ACID EXTRA PURE	1399
	HYDROCHLORIC ACID 6N LOW IN SR&RB	1771
	HYDROCHLORIC ACID CP	2224
	HYDROCHLORIC ACID 32%	5410
	HYDROCHLORIC ACID 36% M&B	2646
	HYDROCHLORIC ACID 32%	919
	HYDROCHLORIC ACID	10674
	HYDROCHLORIC ACID 32%	A420
	HYDROCHLORIC ACID	4600
	HYDROCHLORIC ACID 1MOL	10714
	HYDROCHLORIC ACID 36%	BSPHL730
	HYDROCHLORIC ACID 32%	A425G
	HYDROCHLORIC ACID 32%	A425P
	HYDROCHLORIC ACID 32%	BSPA4
	HYDROCHLORIC ACID 32%	BSPHL308

Other Information NEW ZEALAND: Ajax Finechem (NZ) Ltd
150B Harris Road, East Tamaki, Auckland
Phone (09) 273 4343
Fax (09) 273 4341
Emergency Advice (NZ): Phone 0800 154 666

2. HAZARDS IDENTIFICATION

Hazard Classification

Australia:

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

New Zealand:

Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

Classified as Dangerous Goods for transport, according to the New Zealand Standard NZS 5433:1999 Transport of Dangerous Goods on Land.

HSNO Classification:

6.1B - Substance that is acutely toxic.

8.1A - Substance that is corrosive to metals.

8.2B - Substance that is corrosive to dermal tissue.

8.3A - Substance that is corrosive to ocular tissue.

9.1D - Substance that is slightly harmful to the aquatic environment or is otherwise designed for biocidal action.

9.3C - Substance that is harmful to terrestrial vertebrates.

Hazard statement code:

H290 May be corrosive to metals.

H300 Fatal if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H401 Toxic to aquatic life.

H433 Harmful to terrestrial vertebrates.

Precautionary statement codes- prevention:

P102 Keep out of reach of children.

P104 Read Safety Data Sheet before use.

P234 Keep only in original container.

P264 Wash hands thoroughly after handling.

P260 Do not breathe mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement codes- Response:

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P330 Rinse mouth.

P331 Do NOT induce vomiting.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

Precautionary statement codes - Storage:

P405 Store locked up.

P406 Store in corrosive resistant container with a resistant inner liner.

Precautionary statement codes - Disposal:

P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

Risk Phrase(s)	R34 Causes burns. R37 Irritating to respiratory system.
Safety Phrase(s)	S23 Do not breathe gas/fumes/vapour/spray S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S27 Take off immediately all contaminated clothing. S38 If insufficient ventilation, wear suitable respiratory equipment. S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label. S24/25 Avoid contact with skin and eyes. S37/39 Wear suitable gloves and eye/face protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Hydrochloric acid	7647-01-0	25-36 %
	Ingredients determined not to be hazardous		Balance to 100%

4. FIRST AID MEASURES

Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.
Ingestion	If swallowed, do NOT induce vomiting. Wash out mouth with water. Seek medical attention.
Skin	Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. Seek medical attention.
Eye	If contact with the eye(s) occurs, wash with copious amounts of water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. Seek medical attention.
First Aid Facilities	Safety showers, eye wash and normal washroom facilities.
Advice to Doctor	Treat symptomatically as for strong acids.
Other Information	For advice, contact a Poisons Information Centre (Phone eg Australia 131 126; New Zealand 0800 764 766) or a doctor (at once).

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Extinguish fire with water fog, foam or dry chemical powder.
Hazards from Combustion Products	Non combustible material.
Specific Hazards	Heating can cause expansion or decomposition leading to violent rupture of containers. The product is strongly acidic and hence may react with metals to produce hydrogen, a flammable gas.
Hazchem Code	2R

Precautions in connection with Fire

Fire-fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Increase ventilation. Wear protective clothing to minimise skin and eye exposure. If possible contain the spill. Place inert absorbent material onto spillage. Mop up material and place into the same container. If the spillage enters the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

7. HANDLING AND STORAGE

Precautions for Safe Handling

When dealing with this product, repeated or prolonged skin exposure without protection should be prevented in order to lessen the possibility of skin disorders. It is essential that all who come into contact with this material maintain high standards of personal hygiene ie. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for Safe Storage

Store in a cool, dry well-ventilated area away from heat, sources of ignition, oxidising agents, foodstuffs, and clothing and out of direct sunlight. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

Australian National Occupational Health And Safety Commission (NOHSC) Exposure Standards:

Substance TWA STEL NOTES

ppm mg/m³ ppm mg/m³

Hydrochloric acid 5 7.5 - - Peak

New Zealand Occupational Safety and Health Service (OSH) Workplace Exposure Standards:

Substance TWA STEL NOTES

ppm mg/m³ ppm mg/m³

Hydrochloric acid 5 7.5 - - ceiling

Biological Limit Values

No Biological limit available.

Engineering Controls

Use with good general ventilation. If mists or vapours are produced local exhaust ventilation should be used.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then respiratory protective equipment should be used suitable for protecting against airborne contaminants. Type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices.

Eye Protection

Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection	Impervious gloves recommended. Final choice of appropriate gloves will vary according to individual. Reference should be made to AS/NZS 2161 Occupational protective gloves- Selection, use and maintenance.
Body Protection	Suitable work wear should be worn to protect personal clothing, eg cotton overalls buttoned at neck and wrist. When large quantities are handled the use of plastic aprons and rubber boots is recommended. Industrial clothing should conform to the specifications detailed in AS/NZS 2919: Industrial clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colourless to yellow, clear liquid, characteristic fumes. Tendency to fume at higher concentrations.
Odour	Not available.
Melting Point	-46.2°C
Boiling Point	108.6°C
Solubility in Water	Soluble.
Specific Gravity	1.16
pH Value	<1.0
Vapour Pressure	17.8 mmHg at 20°C
Vapour Density (Air=1)	Not available.
Volatile Component	Hydrogen Chloride Gas
Flash Point	Not applicable.
Auto-Ignition Temperature	Not available.
Flammable Limits - Lower	Not applicable.
Flammable Limits - Upper	Not applicable.
Molecular Weight	36.46

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Extremes of temperature and direct sunlight.
Incompatible Materials	Will react with water or steam to produce toxic and corrosive fumes. Keep away from strong oxidising agents and strong bases. Avoid contact with metals. Reacts with zinc, brass, galvanised iron, aluminium, copper and copper alloys. Keep away from cyanides and sulphides.
Hazardous Decomposition Products	Hydrogen Chloride.

Hazardous Polymerization Will not occur.

11. TOXICOLOGICAL INFORMATION

Inhalation Irritating to respiratory system. Inhalation of product vapours will cause irritation of the nose, throat and respiratory system.

Ingestion Will cause severe irritation and chemical burns to the mouth, oesophagus and stomach. Symptoms may include nausea, vomiting, perforation with severe abdominal pain and bleeding, breathing difficulties, shock, convulsions, collapse and possibly lead to death.

Skin Will cause severe irritation and possible burns to the skin, which can result in redness, itchiness, pain and swelling. Repeated or prolonged contact may also lead to dermatitis.

Eye Will cause severe irritation to the eyes, which can result in redness, stinging, pain, loss of colour vision (blue vision), corneal oedema, lachrymation and possibly irreversible eye damage i.e. corneal burns.

Chronic Effects Prolonged or repeated skin contact may cause defatting leading to dermatitis.

12. ECOLOGICAL INFORMATION

Ecotoxicity Not available.

Persistence / Degradability Not available.

Mobility Not available.

Other Precautions

Environment Protection Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations Dispose of waste according to federal, EPA and state regulations.

14. TRANSPORT INFORMATION

Transport Information

Australia:

This material is classified as a Class 8 Corrosive Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:

- Class 1, Explosive
- Class 4.3, Dangerous When Wet Substance
- Class 5.1, Oxidising Agent
- Class 5.2, Organic Peroxide
- Class 6, Toxic and Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids
- Class 7, Radioactive Substance

And are incompatible with food and food packaging in any quantity.

New Zealand:

This material is classified as a Class 8 Corrosive Substance according to NZS 5433:1999 Transport of Dangerous Goods on Land.

Must not be loaded in the same freight container or on the same vehicle with:

- Class 1, Explosives
- Class 5.1, Oxidising substances
- Class 5.2, Organic peroxides
- Class 7, Radioactive materials unless specifically exempted

And are incompatible with food and food packaging in any quantity.

Note 1: Cyanides (Class 6.1) must not be loaded in the same freight container or on the same vehicle with acids (Class 8).

Note 2: Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered as strong.

Must not be loaded with in the same freight container; and on the same vehicle must be separated horizontally by at least 3 metres unless all but one are packed in separate freight containers with:

- Class 4.3, Dangerous when wet substances

Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices with:

- Class 4.3, Dangerous when wet substances
- Class 5.1, Oxidising substances
- Class 5.2, Organic peroxides

And are incompatible with food and food packaging in any quantity.

U.N. Number 1789

Proper Shipping Name HYDROCHLORIC ACID

DG Class 8

Hazchem Code 2R

Packaging Method 3.8.8RT8

Packing Group II

EPG Number 8A1

IERG Number 40

15. REGULATORY INFORMATION

Regulatory Information Australia:
Classified as hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC).
Poison Schedule: Schedule 6

Poisons Schedule S6

National and or International Regulatory Information New Zealand:
Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Group Standard:
Additives, Process Chemicals and Raw Materials (Toxic [6.1], Corrosive)
Group Standard 2006
HSNO Approval Number: HSR002510

Hazard Category Corrosive

16. OTHER INFORMATION

**Date of
preparation or
last revision of
MSDS**

MSDS reviewed: November 2007

**Contact
Person/Point**

For further information contact Tom Sadler on 1300 884 078 during business hours. In case of emergency call Australia 1800 638 556/ New Zealand 0800 154 666.

IMPORTANT ADVICE: This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Ajax Finechem Pty Ltd. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

End of MSDS

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