



Section 1: Identification of the Material and Supplier

Product Name: Acid Plus

Other Names: Hydrochloric acid solution.

Proper shipping name (ADG Code): Hydrochloric acid 16 % solution.

Recommended use: In metal pickling.
Use as directed on the product label.

Supplier: Hunters Products (TAS) Pty. Ltd.,
A.C.N. 004 601 263

HEAD OFFICE

60 Gleadow Street,
INVERMAY TAS 7248
Tel: 03 6331 4755
Fax: 03 6334 1065

HOBART OFFICE

105 Albert Road,
MOONAH TAS 7009
Tel: 03 6228 7955
Fax: 03 6228 7988

BURNIE OFFICE

22 Pearl Street,
WIVENHOE TAS 7320
Tel: 03 6431 9627
Fax: 03 6432 2083

Emergency Phone Numbers:

Transport/Fire Emergency: 000 (Emergency services)
Medical Emergency: 131126 (Poisons Information Centre)

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.

Dangerous goods.

Risk Phrases: R: 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases: S: 1/2 Keep locked up and out of the reach of children.
S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S: 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Section 3: Composition/Information on Ingredients

Ingredients:

Hydrochloric acid	[7647-01-0]	16 %
Other ingredients deemed not to be hazardous		< 10 %
Water	[7732-18-5] to	100 %

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eyes: 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.

Inhaled: Remove from exposure, rest and keep warm. Seek medical advice.

First Aid facilities:

Mandatory: Eye wash. Hand wash basin.

Recommended: Emergency shower if handling industrial quantities.

Advice to Doctor:

Product is an aqueous solution of hydrochloric acid. May cause irritation or burns. Contains low proportions of surfactant. If swallowed, vomiting should not have been induced because of risk of aspiration of acidic froth into the lungs. Contact Poisons Information Centre.

Aggravated medical conditions:

No specific data found.

Section 5: Fire Fighting Measures

HAZCHEM Code: 2 R

Evacuate: No.

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Water vapour, hydrogen chloride, oxides of carbon.

Protective Equipment: Full protective clothing including breathing apparatus and protective gloves.

Section 6: Accidental Release Measures

Emergency Procedures:

Dilute.
Increase ventilation.

For large spills:

Contain spillages with sand or earth. Transfer both liquid and solids to suitable container(s). Treat residues as for small spills.

For small spills:

Spills may be neutralised by the liberal application of soda ash or crushed limestone. After reaction has ceased, mop up cautiously with plenty of water and run to waste, diluting greatly with running water. Otherwise, absorb on inert absorbent and transfer to suitable closed container. Wash site of spillage thoroughly with water and detergent. Ventilate area to dispel any residual vapours.

Section 7: Handling and Storage

Precautions for safe handling:

Avoid contact with skin and eyes.
Avoid breathing concentrated vapours.

Conditions for safe storage:

Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bonded dangerous goods store. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from naked flames and other sources of ignition. Keep away from oxidising alkalis, oxidising agents and active metals. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Alkalis, other mineral acids, oxidising agents, active metals, cyanides, sulphides, sulphites.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA: Hydrogen chloride 5 ppm, 7.5 mg/m³

ES-STEL: None assigned.

ES-PEAK: Hydrogen chloride 5 ppm, 7.5 mg/m³

Notations: None assigned.

Section 10: Stability and Reactivity

- Chemical Stability:** Stable under normal conditions.
- Conditions to Avoid:** Incompatible materials, light.
- Incompatible Materials:** Alkalis, oxidising agents, active metals, cyanides, sulphides, sulphites, concrete.
- Hazardous Decomposition Products:** Hydrogen chloride.
- Hazardous Reactions:** May react vigorously or violently with alkalis.
Contact with cyanides, sulphides or sulphites may generate toxic gases.
Exposure of formaldehyde vapours to hydrogen chloride may form bis(chloromethyl) ether, a potent carcinogen.

Section 11: Toxicological Information

Health Effects:

No data available for the mixture. Information presented relates to individual ingredients.

- Acute:**
- Swallowed:** Corrosive to mouth, throat and stomach. May cause immediate pain and burns. Small doses are likely to cause gastric upset, nausea, vomiting and diarrhoea. An aspiration risk.
 - Skin:** Corrosive. May cause redness, severe irritation and burns. Hydrochloric acid may be absorbed through the skin in harmful amounts. Will have a degreasing effect on the skin.
 - Eyes:** Corrosive. May cause severe burns to eye tissues and permanent eye damage. Slight exposure may cause painful sensitisation to light. Over-exposure may result in loss of sight.
 - Inhaled:** Inhalation of vapours or aerosols may cause coughing, choking, inflammation of the nose, throat and upper respiratory tract, sore throat and shortness of breath. May cause tissue damage to the mucous membranes. Aspiration of acidic froth into the lungs during swallowing or vomiting may cause serious chemical pneumonitis (inflammation and damage to lung tissues) and pulmonary oedema (fluid build-up in the lungs). Onset of symptoms may be delayed.

Chronic:	Repeated low-level exposure to hydrochloric acid vapours may cause erosion of the teeth. Hydrochloric acid is classified by IARC as Group 3; unclassifiable as to carcinogenicity to humans (inadequate animal evidence, inadequate human evidence). (1)	
LD₅₀ :	Hydrochloric acid	900 mg/kg oral, rabbit.
LC₅₀ :	Hydrochloric acid	1,108 ppm/1 hour, mouse.
LDLo:	Hydrochloric acid	81 mg/kg unspecified route, man.
LCLo:	Hydrochloric acid	3,000 ppm/5 minutes, human. 1,300 ppm/30 minutes, human.

Section 12: Ecological Information

Ecotoxicity:	Harmful to aquatic organisms.
Persistence and degradability:	The surfactant used in this product is not considered to be readily biodegradable.
Mobility:	Readily transported by water.
Environmental Fate:	No data.
Bioaccumulative potential:	No data.
Other adverse environmental effects:	Contains surfactant. Local concentrations may be harmful to aquatic organisms, including fish.

Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal.

Consult appropriate local and State regulations.

Discharge of large quantities of acidic waste to concrete sewer may be regulated by local authorities.

Disposal methods and containers:

Avoid disposal to sewer, natural waters or the environment.

Special precautions for landfill or incineration:

Unsuitable for incineration.

May be unsuitable for some landfill sites without prior neutralisation.

Section 14: Transport Information

UN Number: 1789

UN Proper shipping name: Hydrochloric acid 16 % solution.

Class and subsidiary risk: 8 Corrosive.

Packaging group: II

Special precautions for user: Do not store or transport with dangerous goods of classes 1, 4.3, 5.1, 5.2, 6 (if cyanides), 7, 8 (if alkalis), foodstuff and foodstuff empties.

HAZCHEM Code: 2 R

Material for export: Regulated.
Refer to **IMO/IMDG** and **IATA/ICAO**.

Section 15: Regulatory Information

Poisons (SUSDP): Schedule 6
Hydrochloric acid > 10 %

Dangerous Goods: Yes. UN 1789 8/II 2 R.

Carcinogen:	Australia	IARC	NTP	RTECS
	No.	Yes.	No.	No.

Agricultural and Veterinary Chemicals Act: Not applicable.

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data.

Section 16: Other information

Date of MSDS update: February 2008
Complete review and re-write of all sections.

Abbreviations:

NOHSC - National Occupational Health and Safety Commission.
 ACGIH - American Conference of Governmental Industrial Hygienists.
 MAK - Maximum workplace concentration - Germany,
(maximale Arbeitsplatzkonzentration)
 IARC - International Agency for Research on Cancer (France).
 NPT - National Toxicology Program (USA).
 RTECS - Registry of Toxic Effects of Chemical Substances.

Literature references:

(1) *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans.* v.54, p.189, 1992.

Other Available Sources of Data:

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.

Australian Dangerous Goods Code.

Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.

Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.

List of Designated Hazardous Substances [10005] - NOHSC.

Merck Index - Merck Inc.

Sax's Dangerous Properties of Industrial Materials - Lewis.

Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.

Handbook of Reactive Chemical Hazards - Bretherick.

Hawley's Condensed Chemical Dictionary - Wiley Interscience.

AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.