Infosafe No™ VARAZ Issue Date :October 2016 ISSUED by HUNTERST

Product Name **HYDROCHLORIC ACID**

1. Identification

GHS Product Identifier	HYDROCHLORIC ACID
Company Name	Hunters Products (TAS) Pty. Ltd. (ABN 004 601 263)
Address	60 Gleadow Street INVERMAY TAS 7248 Australia
Telephone/Fax Number	Tel: 03 6331 4755 Fax: 03 6334 1065
Emergency phone number	0407 610 542
Recommended use of the chemical and restrictions on use	Precursor for generation of chlorine dioxide gas used in water treatment.

2. Hazard Identification

GHS classification of the substance/mixture	Skin Corrosion/Irritation: Category 1B STOT Single Exposure: Category 3 (respiratory tract irritation)
Signal Word (s)	DANGER
Hazard Statement (s)	H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation.
Precautionary statement – General	P102 Keep out of reach of children. P103 Read label before use.
Pictogram (s)	Corrosion,Exclamation mark

Precautionary statement – Prevention	P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash contaminated skin thoroughly after handling P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement – Response	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 victim 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. P363 Wash contaminated clothing before reuse.
Precautionary statement – Storage	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Precautionary statement – Disposal	P501 Dispose of contents/container in accordance with local regulations.

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Hydrochloric acid	7647-01-0	>20%
	Water	7732-18-5	to 100%

4. First-aid measures

Inhalation Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume

	most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.
Ingestion	Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.
Skin	If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor.
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. Continue to wash with large amounts of water until medical help is available.
First Aid Facilities	Eye wash station and normal washroom facilities. Emergency shower if handling industrial quantities.
Advice to Doctor	Product is a strong hydrochloric acid solution. If swallowed, vomiting should not have been induced because of risk of aspiration of strongly acidic froth into the lungs. Toxic by inhalation. Causes severe burns. Contact Poisons Information Centre.

5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing media appropriate to surrounding fire. Use water spray to cool containers and surrounds.
Specific Methods	Fire-fighters to wear self contained breathing apparatus and protective equipment. If safe to do so remove containers from path of fire.
Specific hazards arising from the chemical	Liberates toxic fumes of hydrogen chloride in a fire. This material is incompatible with steel, other common metals and nylon. Alkalis may have violent reactions.
Hazchem Code	2R

6. Accidental release measures

Emergency Procedures	Dilute. Increase ventilation.
Spills & Disposal	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.

7. Handling and storage

Precautions for Safe Handling	Avoid contact with skin and eyes. Avoid breathing concentrated vapours.
Conditions for safe storage, including any incompatibilities	Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bunded 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.
Unsuitable Materials	Incompatibles: Alkalis, other mineral acids, oxidising agents, active metals, cyanides, sulphides, sulphites.

8. Exposure controls/personal protection

Occupational exposure limit values

Name	STEL		TWA		
	mg/m3	ppm	mg/m3	ppm	Footnote
Hydrochloric acid			7.5	5	Peak limitation

Appropriate engineering controls

Avoid using active metals (such as aluminium, tin, zinc, copper) as materials of construction. Ensure adequate ventilation (same as outdoors) when using. If handling industrial quantities, or if vapour risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible and at least below the TLV.

Personal Protective Equipment

Avoid contact with skin and eyes. Avoid breathing vapours. Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

Normal Use:
- Eye/face protection
- Gloves, rubber or plastic.

Industrial Quantities:
- Full face respirator fitted with acid vapour filters
- Face shield or safety glasses
- Gloves, rubber or plastic
- Plastic apron, sleeves and boots
- Impervious overalls.

Always maintain a high level of personal hygiene when using this product. That is wash hands before eating, drinking, smoking or using the toilet.

9. Physical and chemical properties

Form Liquid

Appearance Clear Colourless to Slightly Yellow liquid.

Odour Characteristic pungent odour of hydrochloric acid.

Boiling Point >98C

Solubility in Water Miscible at all concentrations.

Specific Gravity 1.14

pH Approx. 1.0

Vapour Pressure Not available

Flash Point None

Flammability Non flammable.

Other Information Reacts vigorously or violently with alkalis. Contact with carbonates or bicarbonates will generate carbon dioxide, a simple asphyxiant. Contact with cyanides, sulphides or sulphites will generate very toxic gases. Corrosive to many common metals, generating hydrogen, a flammable gas. Corrosive to concrete floors and walls. May turn yellow on exposure to direct sunlight. Slippery when spilled.

10. Stability and reactivity

Chemical Stability Stable under normal use conditons.

Conditions to Avoid Incompatible materials, sunlight.

Incompatible Materials Alkalis, oxidising agents, active metals, cyanides, sulphides, sulphites, concrete.

Hazardous Decomposition Products Hydrogen chloride, chlorine.

Possibility of hazardous reactions May react vigorously or violently with alkalis. Contact with carbonates or bicarbonates generates carbon dioxide.

11. Toxicological Information

Acute Toxicity - Oral	LD50: Hydrochloric acid 900 mg/kg oral, rabbit.
Ingestion	Corrosive. May be fatal. Will cause immediate pain, burns to the mouth, throat, oesophagus and gastrointestinal tract. May cause permanent tissue destruction of the oesophagus and digestive tract. Small quantities are likely to cause gastric upset, nausea, vomiting and diarrhoea. An aspiration risk.
Inhalation	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.
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.
Eye	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.
Chronic Effects	Repeated or prolonged eye exposure to vapours may result in total loss of vision. Long term exposure to vapours may lead to erosion of the teeth.

12. Ecological information

Ecotoxicity	Harmful to aquatic organisms.
Mobility	Readily transported by water.
Other Adverse Effects	Local concentrations may be harmful to aquatic organisms, including fish.
Environmental Protection	Avoid contaminating waterways, drains, sewers, or ground.

13. Disposal considerations

Waste Disposal	Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Normally suitable for disposal by approved waste disposal agent.
Special precautions for landfill or incineration	Unsuitable for incineration. May be unsuitable for some landfill sites without prior neutralisation.
Local Legislation	Discharge of large quantities of acidic waste to concrete sewer may be regulated by local authorities.

14. Transport information

Transport Information	Classified as a Class 8 Dangerous Good. Dangerous Goods of Class 8 Corrosives are incompatible in a placard load with any of the following: - Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids and Class 7.
U.N. Number	1789
UN proper shipping name	HYDROCHLORIC ACID
Transport hazard class(es)	8
Hazchem Code	2R
Packing Group	II
EPG Number	8A1
IERG Number	40

15. Regulatory information

Poisons Schedule	S6
AICS (Australia)	All components listed.

16. Other Information

Date of preparation or last revision of SDS	29/10/2016
Literature References	Preparation of Safety Data Sheets for hazardous Chemicals Code of Practice Standard for the Uniform Scheduling of Medicines and Poisons Australian Code for the Transport of Dangerous Goods by Road & Rail Globally Harmonised System of classification and labelling of chemicals
Signature of Preparer/Data Service	Technical Manager 0407 610 542
Technical Contact Numbers	Emergency Advice All Hours: Technical Manager: 0407 610 542 Mon-Fri 8am - 6pm Poisons Information Centre: 13 11 26 - 24hrs Transport/Fire Emergency: 000 (Emergency services)
Other Information	This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the Workplace. Please refer to the technical datasheet (Instructions for use), and the label on the drum. The company cannot anticipate or control the individual working conditions encountered and so each user should read this SDS carefully, and if in doubt ring the Contact Point Number given below. ...End Of MSDS...