Infosafe No™ VARAZ | Issue Date :October 2024 | ISSUED by HUNTERST

Product Name **HYDROCHLORIC ACID**

## Section 1 - Identification

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| **Product Identifier** | HYDROCHLORIC ACID |
| **Company Name** | Hunters Products (TAS) Pty. Ltd. (ABN 004 601 263) |
| **Address** | 60 Gleadow Street INVERMAY<br>TAS 7248 AUSTRALIA |
| **Telephone/Fax Number** | Tel: 03 6331 4755<br>Fax: 03 6334 1065 |
| **Emergency Phone Number** | 0417 744 144 |
| **Recommended use of the chemical and restrictions on use** | Precursor for generation of chlorine dioxide gas used in water treatment. |

## Section 2 - Hazard(s) Identification

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| **GHS Classification of the Substance/Mixture** | Skin corrosion/irritation: Category 1B<br>Specific target organ toxicity (single exposure): Category 3 (Respiratory tract irritation) |
| **Signal Word** | DANGER |
| **Hazard Statement (s)** | H314 Causes severe skin burns and eye damage.<br>H335 May cause respiratory irritation. |
| **Pictogram (s)** | Corrosion,Exclamation mark |

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| **Precautionary Statement – Prevention** | P260 Do not breathe dust/fume/gas/mist/vapours/spray.<br>P264 Wash contaminated skin thoroughly after handling.<br>P271 Use only outdoors or in a well-ventilated area.<br>P280(f) Wear protective gloves/protective clothing/eye protection/face protection. |
| **Precautionary Statement – Response** | P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.<br>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].<br>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P310 Immediately call a POISON CENTER/doctor.<br>P363 Wash contaminated clothing before reuse. |
| **Precautionary Statement – Storage** | P405 Store locked up. |
| **Precautionary Statement – Disposal** | P501 Dispose of contents/container in accordance with local regulations. |
| **Precautionary Statement – General** | P102 Keep out of reach of children.<br>P103 Read carefully and follow all instructions. |

## Section 3 - Composition and Information on Ingredients

**Ingredients**

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

## Section 4 - First Aid Measures

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| **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. |

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| | 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** | 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. |

## Section 5 - Firefighting Measures

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| **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 |

## Section 6 - Accidental Release Measures

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| **Emergency Procedures** | Dilute.<br>Increase ventilation. |
| **Spills & Disposal** | For large spills:<br>Contain spillages with sand or earth. Transfer both liquid and solids to suitable container(s). Treat residues as for small spills.<br>For small spills:<br>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

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| **Precautions for Safe Handling** | Avoid contact with skin and eyes.<br>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. |

## Section 8 - Exposure Controls and Personal Protection

**Occupational Exposure Limit (OEL) Values**

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

**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.

## Section 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.

## Section 10 - Stability and Reactivity

**Chemical Stability** Stable under normal use conditons.

**Possibility of Hazardous Reactions** May react vigorously or violently with alkalis. Contact with carbonates or bicarbonates generates carbon dioxide.

**Conditions to Avoid** Incompatible materials, sunlight.

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

**Hazardous Decomposition Products** Hydrogen chloride, chlorine.

## Section 11 - Toxicological Information

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| **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. |

## Section 12 - Ecological Information

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| **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. |

## Section 13 - Disposal Considerations

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| **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 Incineration or Landfill** | 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. |

## Section 14 - Transport Information

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| **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. |
| **ADG UN Number** | 1789 |
| **ADG Proper Shipping Name** | HYDROCHLORIC ACID |
| **ADG Transport Hazard Class** | 8 |
| **ADG Packing Group** | II |
| **Hazchem Code** | 2R |
| **EPG Number** | 8A1 |
| **IERG Number** | 40 |

## Section 15 - Regulatory Information

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| **Poisons Schedule** | S6 |
| **Australia (AICS/AIIC)** | All components listed. |

## Section 16 - Any Other Relevant Information

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| **Date of Preparation** | 28/10/2024 |
| **Literature References** | Preparation of Safety Data Sheets for hazardous Chemicals Code of Practice<br>Standard for the Uniform Scheduling of Medicines and Poisons<br>Australian Code for the Transport of Dangerous Goods by Road & Rail<br>Globally Harmonised System of classification and labelling of chemicals GHS7 |
| **Signature of Preparer/Data Service** | Technical Manager 0417 744 144 |
| **Technical Contact Numbers** | Emergency Advice All Hours:<br>Technical Manager: 0417 744 144 Mon-Fri 8am - 6pm<br>Poisons Information Centre: 13 11 26 - 24hrs<br>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.<br>...End Of MSDS... |