



Concrete Tool Importers Ltd

PRODUCT: CTI HYDROCHLORIC ACID >32%

Issue Date: 19/07/2024

SAFETY DATA SHEET (SDS)

SECTION 1: INFORMATION

Product Name: Hydrochloric Acid Solution (>32%)

Product Code:

Recommended Uses: For etching concrete and cementitious products

Company Contact: Concrete Tool Importers Ltd
76a Oxford St
Richmond
Nelson 7020

Customer Service Toll Free Number:
0800 727 333
(Mon-Fri 7:30am-5:00pm)
sales@concretetools.co.nz
www.concretetools.co.nz

EMERGENCY TELEPHONE NUMBER
0800 POISON (0800 764 766)

New Zealand Fire Service - 111

SECTION 2: HAZARD IDENTIFICATION

This material is hazardous according to health criteria of ERMA New Zealand

Signal Word: DANGER

Hazard classification: Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories: Corrosive to Metals - Category 1

Skin Corrosion/Irritation - Category 1B

Serious Eye Damage/Irritation - Category 1

Specific Target Organ Toxicity (Single Exposure) - Category 3

Pictogram:



Hazard Statements:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage

H335 May cause respiratory irritation.

H433 Harmful to terrestrial vertebrates.

Prevention Precautionary Statement(s):

P260 Do not breathe fume/mist/vapours/spray.

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

P271 Use only outdoors or in a well-ventilated area.

Response Precautionary Statement(s):

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

P310 Immediately call a POISON CENTER or doctor/physician.

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

P390 Absorb spillage to prevent material damage.

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

P363 Wash contaminated clothing before reuse.

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

Storage Precautionary Statement(s)

P403 + P233 Store in a well-ventilated place. Keep container

tightly closed.

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

P405 Store locked up

Disposal Precautionary Statement(s)

P501 Dispose of contents/container in accordance with local / regional / national / international regulations.

Class: 8

HSNO Classifications Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Health	6.1B	Substances that are acutely toxic - Fatal
Hazards	6.1D	Substances that are acutely toxic - Harmful
	8.1A	Substances that are corrosive to metals
	8.2B	Substances that are corrosive to dermal tissue UN PGII
	8.3A	Substances that are corrosive to ocular tissue
Environmental Hazards	9.1D	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action
	9.3C	Substances that are harmful to terrestrial vertebrates

SECTION 3: PHYSICAL COMPOSITION

Ingredients

Chemical Entity
Hydrochloric Acid
Water

CAS No	Proportion
7647-01-0	>32%
7732-18-5	Balance %

SECTION 4: FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poison Information Centre. 0800 764 766

First Aid measures:

Inhalation: If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial

respiration if not breathing, preferably with a demand valve resuscitator, bag valve mask, or pocket mask as trained. Perform CPR if necessary. Transport to hospital or doctor without delay.

Skin contact: Immediately flush body and clothing with large amounts of water, using safety shower if available. Quickly remove contaminated clothing including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poison Information centre. Transport to hospital or doctor.

Ingestion: For advise, contact a Poison Information centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head down position, if possible) to maintain open airway and prevent aspiration. Observe patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness i.e. becoming unconscious. Give water to rinse mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital without delay.

Eye Contact: Immediately hold eyelids apart and flush the eye continuously with running water. ensure complete irrigation of the eye by keeping the eyelids apart and away from eye and moving the eyelids occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Notes for medical personnel: Treat symptomatically. For acute or short term repeated exposure to strong acids : Airway problems may arise from laryngeal oedema and inhalation exposure. Treat with 100% oxygen initially. Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling. Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise. Strong acids produce a coagulation necrosis characterised by formation of a coagulum (eschar) as a result of the desiccating action of the acid on proteins in specific tissues.

Ingestion : Immediate dilution (milk or water) within 30 minutes post ingestion is recommended. DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury. Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluid to one or two glasses in an adult. Charcoal has no place in acid management. Some authors suggest the use of lavage with 1 hour of ingestion.

Skin : Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non adherent gauze and wrapping. Deep second degree burns may benefit from topical silver sulfadiazine.

Eye : Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sacs. Irrigation should last at least 20-30 mins. DO NOT use neutralising agents or any other additives. Several litres of saline are required. Cycloplegic drops (1% cyclopentolate for short term use or 5% homatropine for longer term use) antibiotic drops, vasoconstrictive agents or artificial tears may be indicated dependent on the severity of the injury. Steroid drops should only be administered with the approval of a consulting ophthalmologist.

SECTION 5: FIRE FIGHTING MEASURES

Type of Hazard: Non flammable

Fire Hazard properties: Substance is non flammable; use water spray, fog or foam. The product is non-combustible. HCL can liberate highly flammable hydrogen gas when in contact with certain metals.

Extinguishing media & method: Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

Fire Fighting Advice: Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) and acid-resistant chemical splash unit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill Clean up methods: 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. Contain the spill and prevent run off into confined areas, drains and waterways. Vapour-suppressing foam may be used to control vapours.

Minor spill: 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. Incineration of disposed material is not recommended, as it is unlikely to adequately burn.

Stop leak if safe to do so. Wash area down with excess water to remove residual material.

Major spill: Do not allow product to reach drains, sewers or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Authority.

Evacuate all unnecessary personnel. Personnel involved in the clean up should wear full protective clothing as listed in section 8

SECTION 7 HANDLING & STORAGE

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. Do not combine part drums of the same product, as this may be a source of

contamination. Do not mix with other chemicals.

Storage Site Requirements: Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use to ensure contamination does not occur. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Keep out of direct sunlight. Keep away from foodstuffs. This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations. This product has a UN classification of 1789 and a Dangerous Goods Class 8 (Corrosive) according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.

Packaging: Container type/packaging must comply with all applicable local legislation. Store in original packaging as approved by manufacturer. Do NOT use aluminium or galvanised containers.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Workplace Exposure Guidelines

The following exposure standard has been established by The Australian Safety and Compensation Council (ASCC); Hydrochloric Acid CAS 7647-01-0: TWA = 5ppm Peak Limitation (7.5 mg/m³ Peak Limitation) NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. Peak limitation is a ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Adequate ventilation should be provided so that exposure limits are not exceeded. If inhalation risk exists then use with local exhaust ventilation or while wearing a suitable respirator. Keep containers closed when not in use.

Personal Protective Equipment (PPE)

RESPIRATOR: 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 (AS/NZS1715/1716).

EYES: Wear safety glasses/goggles with side shield protection and/or full-face shield (AS1336/1337).

HANDS: Wear 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. (AS2161). **CLOTHING:** Wear waterproof apron, coveralls, trousers, long sleeved shirt, closed in shoes and/or safety footwear (AS3765/2210).

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.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance:	Liquid
Odour:	Pungent
Colour:	Clear, colourless
Boiling Point:	109° C
Melting Point:	< -20° C
Vapour Pressure:	2 kPa (no data available)
Solubility in water:	Miscible with water
Weight per cubic metre:	No data available
Flammability Class:	No data available
Extinguishing Media:	No data available
Specific Gravity:	1.161
Freezing Point:	No data available
Percent Volatile:	No data available
Evaporation Rate:	As for water
PH (% in water):	<1 Neat
Flash Point:	No data available
Auto Ignition Temp:	No data available
Coefficient of cubic expansion:	No data available
Relative vapour Density:	1.3 Air = 1
Decomposition point:	No data available
Viscosity:	No data available
Electrostatic generation:	No data available
% volatile by volume:	No data available
Flammable Limits:	No data available
Explosion Hazard:	No data available
Molecular weight:	No data available

SECTION 10 STABILITY AND REACTIVITY

Stability of the substance Corrosive Liquid. Contact with alkaline material liberated heat. Product is stable under normal conditions of use, storage and temperature.

Conditions to avoid Do not combine part drums of the same product, as this may be a source of contamination. Avoid Excess heat.

Material to avoid etc. alcohols and amines. Oxidising agents e.g. Hypochlorite's, alkalis, most metals

Hazardous decomposition Products HCL can liberate highly flammable hydrogen gas when in contact with certain metals.

Hazardous polymerization 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

SECTION 11 TOXICOLOGICAL INFORMATION

Chronic Effects:

Ingestion: Ingestion of acidic corrosives may produce burns around and in the mouth, the throat and oesophagus. Immediate pain and difficulties in swallowing and speaking may also be evident.

Eye contact: The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.

Inhalation: Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness.

Skin Irritant: The material can produce chemical burns following direct contact with the skin. Skin contact with acidic corrosives may result in pain and burns ; these may be deep with distinct edges and may heal slowly with the formation of scar tissue.

Other: Substance accumulation, in the human body may occur and may cause some concern following repeated or long term occupational exposure. Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and or ulceration of the mouth lining

Summarise data Inhalation , Rat LC50 : 4.2 - 4.7 mg/l/1h

SECTION 12 ECOLOGICAL INFORMATION

Potential Environmental Interactions 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

Data organization

Persistence is unlikely based on information available. No information available

Environmental risk phrases

No Data Available
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.

SECTION 13 DISPOSAL CONSIDERATIONS

General Information Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

Special Precautions for Land Fill Contact a specialist disposal company or the local waste regulator for advice. 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.

SECTION 14 TRANSPORT INFORMATION

Road & Rail

NZS5433

UN Number:	1789
Dangerous Goods	Class: 8 Corrosive Substances
Hazchem Code:	2R
Packing Group:	II
Proper Shipping Name:	Hydrochloric Acid
EPG:	40 Toxic And/or Corrosive Substances Non-Combustible - Water Reactive

Segregation:

Marine

IMDG Code

UN Number:	1789
Class:	Class 8 Corrosive Substances
Hazchem:	2R
Packing Group:	II
Proper Shipping Name:	Hydrochloric Acid
EMS:	FA,SB
Marine Pollutant:	No

Air Transport

IATA DGR

UN Number:	1789
Class:	Class 8 Corrosive Substances
Hazchem:	2R

Packing Group: II
Proper Shipping Name: Hydrochloric Acid

SECTION 15 REGULATORY INFORMATION

Regulatory status Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act
2015

Approval Code HSR001557

SECTION 16 OTHER INFORMATION

Related Product Codes HYACIB1000, HYACIB1500, HYACIB1600, HYACIB1893,
HYACIB1900, HYACIB1901, HYACIB1902, HYACIB1903,
HYACIB1904, HYACIB1940, HYACIB2000, HYACIB2100,
HYACIB2200, HYACIB2300, HYACIB2500, HYACIB2510,
HYACIB3000, HYACIB3001, HYACIB3002, HYACIB3003,
HYACIB3004, HYACIB3005, HYACIB3060, HYACIB3200,
HYACIB3500, HYACIB3600, HYACIB3700, HYACIB3701,
HYACIB3702, HYACIB3703, HYACIB4000, HYACIB4005,
HYACIB5000, HYACIB6000, HYACIB6700, HYACIB6900,
HYACIB7500, HYACIB7900, HYACIB8000, HYACIB8001,
HYACIB8100, HYACIB8500, HYACIB8501, HYACIB8502,
HYACIB9000, HYACIB9500, HYACIB9600, HYACIB9601,
HYACIB9602, HYACIB9603, HYACIB9604, HYACIC1000,
HYACIC1001, HYACIC1300, HYACIC1500, HYACIC2000,
HYACIC2001, HYACIC3000, HYACIC3001, HYACIC3002,
HYACIC3003, HYACIC3004, HYACIC3005, HYACIC3006,
HYACIC3007, HYACIC3008, HYACIC3050, HYACIC3070,
HYACIC3300, HYACIC3400, HYACIC3700, HYACIC4003,
HYACIC4400, HYACIC5000, HYACIC6000, HYACIC6300,
HYACIC6301, HYACIC6500, HYACIC7300, HYACIC7500,
HYACIC7501, HYACIC7502, HYACIC7505, HYACIC8000,
HYACID0800, HYACID1000, HYACID1001, HYACID1002,
HYACID1003, HYACID1004, HYACID1005, HYACID1006,
HYACID1007, HYACID1008, HYACID1009, HYACID1010,
HYACID1011, HYACID1012, HYACID1013, HYACID1014,
HYACID1015, HYACID1016, HYACID1017, HYACID1018,
HYACID1019, HYACID1020, HYACID1021, HYACID1022,
HYACID1023, HYACID1024, HYACID1025, HYACID1026,
HYACID1027, HYACID1028, HYACID1200, HYACID1300,
HYACID1301, HYACID1400, HYACID1500, HYACID1501,
HYACID1600, HYACID1700, HYACID1701, HYACID1730,
HYACID1733, HYACID1800, HYACID1801, HYACID1802,
HYACID1803, HYACID1804, HYACID1805, HYACID1806,
HYACID1807, HYACID1808, HYACID1812, HYACID1813,
HYACID1814, HYACID1815, HYACID1816, HYACID1817,
HYACID1818, HYACID1821, HYACID1822, HYACID1823,

HYACID1824, HYACID1825, HYACID1826, HYACID1827,
HYACID1828, HYACID1829, HYACID1830, HYACID1831,
HYACID1832, HYACID1833, HYACID1834, HYACID1835,
HYACID1836, HYACID1837, HYACID1838, HYACID1839,
HYACID1840, HYACID1841, HYACID1842, HYACID1857,
HYACID1858, HYACID1859, HYACID1860, HYACID1861,
HYACID1862, HYACID1863, HYACID1864, HYACID1865,
HYACID1866, HYACID1867, HYACID1868, HYACID1869,
HYACID1870, HYACID1871, HYACID1872, HYACID1873,
HYACID1874, HYACID1875, HYACID1876, HYACID1877,
HYACID1878, HYACID1879, HYACID1880, HYACID1881,
HYACID1882, HYACID1883, HYACID1884, HYACID1885,
HYACID1886, HYACID1887, HYACID1888, HYACID1889,
HYACID1890, HYACID1891, HYACID1892, HYACID1893,
HYACID1894, HYACID1895, HYACID1896, HYACID1897,
HYACID1898, HYACID1899, HYACID1900, HYACID1901,
HYACID1902, HYACID1903, HYACID1904, HYACID1905,
HYACID1906, HYACID1907, HYACID1908, HYACID1909,
HYACID1910, HYACID1911, HYACID1912, HYACID1913,
HYACID1914, HYACID1915, HYACID1917, HYACID1919,
HYACID1924, HYACID1927, HYACID1930, HYACID1932,
HYACID1934, HYACID1935, HYACID1940, HYACID1948,
HYACID1957, HYACID2000, HYACID2001, HYACID2002,
HYACID2003, HYACID2034, HYACID2100, HYACID2200,
HYACID2300, HYACID2400, HYACID2500, HYACID2501,
HYACID2505, HYACID2506, HYACID2507, HYACID2508,
HYACID2509, HYACID2510, HYACID2600, HYACID2900,
HYACID3000, HYACID3001, HYACID3002, HYACID3006,
HYACID3050, HYACID3100, HYACID3500, HYACID3600,
HYACID3700, HYACID3701, HYACID4000, HYACID4200,
HYACID5000, HYACID5100, HYACID5500, HYACID6000,
HYACID6010, HYACID6050, HYACID6500, HYACID6501,
HYACID7000, HYACID7100, HYACID7200, HYACID7300,
HYACID7500, HYACID8000, HYACID8100, HYACID9500,
HYACID9501, HYACID9502, HYACID9503, HYACID9505,
HYACID9506, HYACID9507, HYACID9508, HYACIL1000

Issue Date: 19/07/24
Review Date: 19/07/29

Note: *All information given by Concrete Tool Importers Ltd is offered in good faith and is, to the best of our knowledge, true and accurate. However, since conditions of use are beyond our control, all information relevant to usage is offered without warranty or guarantee and should not be construed as a representation that the product is suitable for any particular purpose or application.*