



MATERIAL SAFETY DATA SHEET

HAZARDOUS SUBSTANCE ACCORDING TO WORKSAFE AUSTRALIA

1. IDENTIFICATION

Product Name: Telchem Hydrochloric Acid 28% (+/- 1%)

Other Names: Muriatic Acid, Spirits of Salts, HCl

Recommended Uses: Acidising of petroleum wells, boiler scale removal, chemical intermediate, ore reduction, food processing, pickling and metal cleaning, alcohol denaturant, pH adjusting of swimming pool water.

Supplier Name: Telford Industries

Street Address: 7 Valentine Street, Kewdale WA 6105

Telephone: 1800 835 115

Facsimile: 1800 835 222

Emergency Telephone Number: 0409 313 441

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of NOHSC Australia.

Hazard Category:

C Corrosive

T Toxic

Risk Phrase(s):

R23 Toxic by inhalation.

R35 Causes severe burns.

Safety Phrase(s):

S1/2 Keep locked up and out of the reach of children.

S9 Keep container in a well ventilated place.

S26 In case of contact with eyes, rinse immediately with plenty of water & seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves & eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

3. COMPOSITION / INGREDIENTS INFORMATION

CHEMICAL NAME	CAS NUMBER	PROPORTION
Hydrochloric Acid	7647-01-0	28% (+/- 1%)
Water	7732-18-5	balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone 131 126)

Inhalation: Remove from exposure, keep warm and rest. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen. Seek immediate medical attention.

Skin Contact: Avoid contact with this chemical. Remove affected clothing including footwear and wash affected area thoroughly copious quantities of water immediately. If irritation occurs, seek medical advice.

Eye Contact: Flush eyes with water immediately for at least 15 minutes. Forcibly hold eyelids apart to ensure complete irrigation of all eye and lid tissue. Seek immediate medical attention.

Ingestion: Wash out mouth with water and give large quantities of water to drink. DO NOT induce vomiting. Transport to hospital immediately.

Notes to physician: Treat symptomatically. Inhalation of high concentration of vapour may cause pulmonary oedema.

5. FIRE-FIGHTING MEASURES

Specific Hazards: Non-combustible material. If involved in fire, this product will release large quantities of hydrogen chloride gas which is very corrosive.

Fire-fighting further advice: Non-combustible liquid. However, will support combustion of other products. Incompatible with oxidizing agents, alkalis, metals, organic halogen compounds, nitro and chloro organic compounds and sources of ignition. Corrosive to steel, aluminium, tin, zinc and most metals generating flammable/explosive hydrogen gas. Will emit toxic fumes in a fire including hydrogen chloride. Fire fighters to wear self-contained breathing apparatus and full protective clothing. If available, spray water on containers to keep cool.

Suitable extinguishing media: Not combustible, however if material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

Hazchem Code: 2R

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal: Hydrochloric Acid is completely soluble in water.

Small Spills: Dilute with a lot of water and wash away. Work from up-wind.

Large Spills: Only persons wearing full protective gear, including forced air breathing equipment, should attempt to deal with either a major leak or a major spill. Contain spill, if at all possible, using solid absorbents such as soil, clay or others eg vermiculite. Make every effort to prevent a major discharge of the product into waterways or sewers. Note: a vapour cloud of acid fumes can be (partially) knocked down with water spray or fog. Larger spills or acid soils can be treated (neutralised) with lime or soda ash.

WARNING: concentrated acid can react violently with these materials, thus neutralising agents

must be added cautiously. Some dilution with water will help, provided the additional volume of liquid can be contained. Once neutralised the liquid or solid absorbent is highly concentrated in chloride salts. Disposal should be decided together with local authorities.

Dangerous Goods - Initial Emergency Response Guide No: 40

7. HANDLING AND STORAGE

Handling: Avoid skin and eye contact and inhalation of vapour. Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling.

Storage: Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials including oxidizing agents, acids, alkalis, metals, organic halogen compounds, nitro and chloro organic compounds and sources of ignition. Use corrosion resistant structural materials and lighting and ventilation systems in the storage area. Protect from direct sunlight, moisture and static discharges.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards: The following exposure standard has been established for this product by The Australian Safety and Compensation Council (ASCC) formerly known as NOHSC; Hydrochloric Acid cas no: 7647-01-0 TWA = 5ppm 7.5mg/m³ Peak limitation

Biological Limit Values: No information available on biological limits for this product.

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.

Personal Protective Equipment: RESPIRATOR: Wear an approved respirator where dusts/vapours are generated and engineering controls are inadequate (EN149). EYES: Chemical eye goggles and face shield (EN166). HANDS: Protective PVC gloves (EN374). CLOTHING: Corrosion-resistant coveralls and safety footwear (EN465).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odour: Colourless to slightly yellow corrosive liquid with pungent acidic odour.

pH: <1

Vapour Pressure: Not available

Vapour Density: 1.3 (air = 1)

Boiling Point/Range °C: 109°C

Melting Point/Range °C: <-20°C

Solubility in Water: 100% soluble in water.

Specific Gravity: 1.13-1.15 at 20°C

Flash Point (°C): Not flammable.

Flammability Limits (%): Not flammable.

Ignition Temperature (°C): Not available

Molecular Formula: HCl

Additional Information:

(Typical values only – consult specification sheet)

10. STABILITY AND REACTIVITY

Chemical Stability: Product is stable under normal conditions of use, storage and temperature.

Conditions to Avoid: Avoid excessive heat, direct sunlight, moisture, static discharges, freezing and high temperatures.

Incompatible Materials: Incompatible with oxidizing agents, acids, alkalis, metals, organic halogen compounds, nitro and chloro organic compounds and sources of ignition.

Hazardous Decomposition Products: Will emit toxic fumes in a fire including hydrogen chloride. Contact with oxidizing agents liberates toxic chlorine gas. Corrosive to metals generating flammable/explosive hydrogen gas.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Inhalation: Toxic by inhalation! Effects of inhaling vapour and mists have not been clearly established. Most references indicate that irritation of the nose, throat and lungs would occur due to the corrosive nature of the product.

Skin Contact: Extremely corrosive! Capable of causing severe skin burns with deep ulceration. Can penetrate to deeper layers of skin. Corrosion will continue until removed. Severity depends on concentration and duration of exposure. Repeated/prolonged contact with dilute solutions may lead to irritant contact dermatitis.

Eye Contact: Extremely corrosive! Can penetrate deeply causing irritation or severe burns depending on the concentration and duration of exposure. In severe cases, ulceration and permanent damage may occur.

Ingestion: Corrosive! Causes burning of the mouth, throat and oesophagus, vomiting, diarrhoea, collapse and possible death may result.

Long Term Effects: No data available.

Acute Toxicity / Chronic Toxicity: Oral LD50 Rat: >900mg/Kg Inhale LC50 Rat: 300ppm/1hr

12. ECOLOGICAL INFORMATION

Ecotoxicity: No information available.

Persistence & Degradability: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority.

14. TRANSPORT INFORMATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG code) for transport by road and rail.

UN No: 1789

Dangerous goods Class:	8
Packing Group:	II
Hazchem Code:	2R
Proper Shipping Name:	HYDROCHLORIC ACID

15. REGULATORY INFORMATION

Poisons Schedule (Aust): S6

16. OTHER INFORMATION

Telford Industries reserves the right to change the chemical specifications without notice.

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This MSDS summarises Telford Industries best knowledge of the health and safety hazard information of the selected substance and how to safely handle the selected substance in the workplace however Telford Industries expressly disclaims that the MSDS is a representation or guarantee of the chemical specifications for the substance.

Each user should read the MSDS and consider the information in the context of how the selected substance will be handled and used in the workplace including its use in conjunction with other substances.

END OF MSDS



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