

# Safety Data Sheet

## Section 1: Product identification and use

**Product Identifier:**

# TCI 301 H.D.

**Process Identifier:**

**Inhibited hydrochloric acid cement, lime, scale, concrete and rust remover (30%)**

24H EMERGENCY: 613-996-6666

**Manufacturer's name and address:**

**Tetra-Chem Industries Ltd.**  
271 Ingersoll St. S., Ingersoll ON N5C 3J7 Canada  
Phone: 519-485-4370 — Toll free: 888-658-5515

**Supplier's name and address:**

**Tetra-Chem Industries Ltd.**  
271 Ingersoll St. S., Ingersoll ON N5C 3J7 Canada  
Phone: 519-485-4370 — Toll free: 888-658-5515

## Section 2: Hazard Identification

### GHS Classification

Acute Toxicity (Inhalation)—Category 4

Corrosive to Metals—Category 1

Serious Eye Damage—Category 1

Skin Corrosion—Category 1

Specific Target Organ Toxicity, Repeated Exposure—Category 2

### Pictograms



### Signal Word

Danger

### Hazard Statements

H290—May be corrosive to metals.

H314—Causes severe skin burns and eye damage.

H318—Causes serious eye damage.

H332—Harmful if inhaled.

H373—May cause damage to organs through prolonged or repeated exposure.

### Precautionary Statements

P234—Keep only in original container.

P260—Do not breathe fumes, mist, vapours or spray.

P261—Avoid breathing fumes, mist, vapours or spray.

P264—Wash hands thoroughly after handling.

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

P280—Wear protective gloves, protective clothing, eye protection and face protection.

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

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

P304+P340—IF INHALED: Remove person to fresh air and keep 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 hospital emergency department doctor.

P312—Call hospital emergency department doctor if you feel unwell.

P314—Get medical advice or attention if you feel unwell.

P321—Specific treatment (treat as acid burn).

P363—Wash contaminated clothing before reuse.

P390—Absorb spillage to prevent material damage.

P405—Store locked up.

P406—Store in a corrosive resistant container of HDPE plastic.

P501—Dispose of contents in accordance with local, regional, national and international government regulations. Return container to supplier for recycling.

## Section 3: Composition / information on ingredients

**Hazardous Ingredients:**

**CHEMICAL NAME**

Hydrochloric acid

**CAS NUMBER**

7647-01-0

**CONCENTRATION [%]**

15 - 40

## Section 4: First aid measures

### Description of First Aid Measures

**General:** Determine areas of exposure.

**Inhalation:** Excessive exposure - move the fresh air.

**Skin Contact:** Wash with cold water or neutralize with baking soda solution.

**Eye Contact:** Remove contact lenses. Rinse with cold water or saline solution.

**Ingestion:** If victim is conscious administer antacid in liquid or tablet form. Seek immediate medical attention. Do not induce vomiting.

### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Medium risk to adverse health effects.

**Inhalation:** Respiratory irritation or sore throat.

**Skin Contact:** Causes severe skin burns.

**Eye Contact:** The acid solution can travel to the back of the eye ball and corrode the optic nerve if sprayed directly into the eyes. The delayed effect symptoms are a scaly rash for 3-4 days when blinking. Seek medical attention.

**Ingestion:** Burning sensation just like acid reflux. Seek medical attention.

## Section 5: Fire-fighting measures

### Extinguishing Media

**Suitable Extinguishing Media:** Evaluate based on surrounding fire.

**Unsuitable Extinguishing Media:** Evaluate based on surrounding fire.

### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Corrosive acid vapors at high temperatures.

**Explosion Hazard:** No risk.

**Reactivity:** No risk.

### Advice for Firefighters

**Precautionary Measures Fire:** Evaluate based on surrounding fire.

**Firefighting Instructions:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Protection During Firefighting:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Hazardous Combustion Products:** Hydrochloric acid vapours.

## Section 6: Accidental release measures

### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Wear impervious splash protection. Neutralize with copious amounts of water or alkaline solutions and flush to ground or sanitary sewers.

### For Non-Emergency Personnel

**Protective Equipment:** Wear impervious splash protection.

**Emergency Procedures:** Neutralize with copious amounts of water or alkaline solution and flush to sanitary sewers. For large spill use containment and dike.

**Phone Number of your local authority for Emergency Spill Response:**

### For Emergency Personnel

**Protective Equipment:** Wear impervious splash protection.

**Emergency Procedures:** Neutralize with copious amounts of water or alkaline solutions and flush salt to ground or sanitary sewers if pH is between 6.5-8.5.

### Environmental Precautions

**Methods and Material for Containment and Cleaning Up**

**For Containment:** Dike with sandbags.

**Methods for Cleaning Up:** Mop up small spills and dispose to sanitary sewer.

## Section 7: Handling and storage

### Precautions for Safe Handling

**Additional Hazards When Processed:** Use only Manufacturer supplied storage and/or dispensing equipment. See GHS WORKPLACE LABEL in your work area.

**Hygiene Measures:** Do not eat, drink or smoke while using this product.

Personal Protection Equipment required.

### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Provide sufficient air exchange in application work areas.

**Storage Conditions:** Keep only in original containers.

**Incompatible Materials:** Do not mix with other cleaners.

**Special Rules on Packaging:** Consult Manufacturer or Supplier.

**Specific End Use(s)** TCI 301 H.D. Inhibited Hydrochloric Acid Cement/Lime/Scale/Concrete and Rust Remover. It is intended for the clean-up procedures in Ready-Mix transportation Industry. Consult Product Application Sheet or label QR for safe intended use.

## Section 8: Exposure controls / personal protection

### Control Parameters

ACGIH TLV: **7 mg/m<sup>3</sup> (TWA) 5 ppm**

OSHA PEL: **7 mg/m<sup>3</sup> (TWA)**

### Exposure Controls

**Appropriate Engineering Controls:** Use adequate ventilation to meet the exposure limits by removing the hazard from an inside or outside work environment. The chemical constituents of the cleaning solution can be atomized by spraying or misting. Vapors are extremely corrosive to steel.

**Personal Protective Equipment:**



**Other Information:** Acid resistant GLOVES are always required to prevent unsuspected and prolonged acid solution pooling. In confined wash bays with minimal ventilation use NIOSH approved respirators for acid mist.

## Section 9: Physical and chemical properties

### Information on Basic Physical and Chemical Properties

**Physical State:** Liquid.

**Appearance:** Water clear with slight tint of amber.

**Odour:** Acidic.

**Odour Threshold:** Not available.

**pH:** 1

**Relative Evaporation Rate (butylacetate=1):** 0.3

**Melting Point:** Not applicable.

**Freezing Point:** - 5°C

**Boiling Point:** 100°C.

**Flash Point:** Not applicable.

**Auto-ignition Temperature:** Not applicable.

**Decomposition Temperature:** Not applicable.

**Flammability (solid/gas):** Not applicable.

**Lower Flammable Limit:** Not applicable.

**Upper Flammable Limit:** Not applicable..

**Vapour Pressure:** 4.16 mmHg @ 20°C.

**Relative Vapour Density at 20°C:** Not applicable..

**Relative Density (water=1):** 1.18

**Solubility in Water:** Complete

**Partition coefficient: n-octanol/water:** Not applicable.

**Viscosity:** 1 centipoise @ 20°C.

**Explosion Data - Sensitivity to Mechanical Impact:** Not applicable.

**Explosion Data - Sensitivity to Static Discharge:** Not applicable.

## Section 10: Stability and reactivity

**Reactivity:** None when used as directed.

**Chemical Stability:** Stable.

**Possibility of Hazardous Reactions:** None when used as directed.

**Conditions to Avoid:** Chlorine or bleach, strong alkalis, metals

**Incompatible Materials:** Chlorine bleach and strong alkali.

**Hazardous Decomposition Products:** Chlorine gas.

## Section 11: Toxicological information

### Information on Toxicological Effects - Product

**Acute Toxicity:** Not available.

**LD<sub>50</sub> Data (Species-Route):** 581 mg/kg(Rat - oral).

**LC<sub>50</sub> Data (Species-Route):** 3,124/1,108 ppm(Rat/Mouse - inhalation) 1hrs.

**Skin Corrosion/Irritation:** Severe irritant/burns (Acute exposure).

**Serious Eye Damage/Irritation:** Stinging, Corneal injury (Acute exposure).

**Respiratory or Skin Sensitization:** Not suspected.

**Germ Cell Mutagenicity:** Not suspected.

**Teratogenicity:** Not suspected.

**Carcinogenicity:** Not suspected.

**Specific Target Organ Toxicity (Repeated Exposure):** Not available.

**Reproductive Toxicity:** Not suspected.

**Specific Target Organ Toxicity (Single Exposure):** Not suspected.

**Aspiration Hazard:** Not anticipated.

**Symptoms/Injuries After Inhalation:** Irritation/burning sensation.

**Symptoms/Injuries After Skin Contact:** Burning redness observation.

**Symptoms/Injuries After Eye Contact:** Stinging/scaly sensation.

**Symptoms/Injuries After Ingestion:** Sore throat/burns.

**Information on Toxicological Effects - Ingredients**

**Large doses can change the body's pH and electrolyte balance.**

## Section 12: Ecological information

**Toxicity:** Acute hazard to the aquatic environment.

**Mobility in Soil:** Neutralizes and binds to soil. Detergents are biodegradable.

**Other Adverse Effects**

**Other Information:** No unusual adverse effects encountered.

## Section 13: Disposal considerations

**Waste Disposal Recommendations:** Consult Manufacturer or Supplier.

**Additional Information:** The cleaning process may generate a hazardous industrial waste. Comply with Canadian Ministry of Environment and Climate Change: Regulation 347 and local municipal by-laws. Comply with US EPA's federal, state

& local regulations. Tetra-Chem Industries Ltd. is licensed by the Ministry of the Environment and Climate Change for waste management.

Ontario Certificate of Approval # A 800506.

**Provincial Waste Class:** Waste stream to be determined for treatment method.

## Section 14: Transport information

**TDGA Canada—Dangerous Goods:** REGULATED

**49 CFR (USA)—Dangerous Goods:** REGULATED

**IMDG (Vessel)—Dangerous Goods:** REGULATED

**IATA (Cargo air)—Dangerous Goods:** REGULATED

**IMDG (Passenger air)—Dangerous Goods:** REGULATED

**EMERGENCY ASSISTANCE:** CANADA Canutec 1-888-CANUTEC (1-888-226-8832)



**Proper Shipping Name:** HYDROCHLORIC ACID

**Hazard Class:** 8

**Identification Number:** UN1789

**Packing Group:** II

**Label /Placard Codes:** 8

## Section 15: Regulatory information

**CANADA:** All ingredients are listed on the DSL Domestic Substance List.

**USA:** All ingredients are listed on the TSCA Toxic Substances Control Act.

## Section 16: Other information

**Prepared by:** Health and Safety committee

**Contact:** A. Struthmann (Hon. BSc.)

**Telephone:** 1-519-536-1617

**Date prepared:** 2023-03-01

**Additional information:** The information in this SDS has been obtained from sources believed to be reliable. The manufacturer and supplier provides no warranties express or implied and assumes no responsibility for the accuracy or the completeness of the data contained herein.