

Safety Data Sheet

Section 1: Product identification and use

Product Identifier:

TCI 1221 H.D.

Process Identifier: Hot aqueous immersion mill scale/iron oxide, rust, glue and paint stripper (ready-to-use)

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

Corrosive to Metals—Category 1
Serious Eye Damage—Category 1
Skin Corrosion—Category 1

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.

Precautionary Statements

P234—Keep only in original container.
P260—Do not breathe mist or spray.

P264—Wash hands thoroughly after handling.
P280—Wear protective gloves and eye protection.
P301+P330+P331—IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352—IF ON SKIN: Wash with plenty of water or use a mild vinegar based rinse.
P303+P361+P353—IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water in sink or shower.
P304+P340—IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338—IF IN EYES: Remove contact lenses if present and easy to do. Rinse cautiously with water or saline buffer solution for several minutes.
P310—Immediately call a doctor at local hospital emergency department.
P321—Specific treatment: Use mild acidic solution to bring pH to 7 and use moisturizing eye drops for several days until eyeball feels perfectly normal again.
P332+P313—If skin irritation occurs: Get medical attention.
P337+P313—If eye irritation persists get medical attention.
P362+P364—Take off contaminated clothing and wash it before reuse.
P363—Wash contaminated clothing before reuse.
P390—Absorb spillage to prevent material damage.
P405—Store locked up.
P406—Store in a corrosion 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
Potassium Hydroxide
1-methyl-4-(1-methylethenyl) cyclohexane
2-Butoxy Ethanol

CAS NUMBER

1310-58-3
5989-27-5
111-76-2

CONCENTRATION [%]

3 - 7
1 - 5
1 - 5

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 5% vinegar solution.

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

Ingestion: If victim is conscious administer 5% vinegar solution.

Seek immediate medical attention. Do not induce vomiting.

Most Important Symptoms and Effects Both Acute and Delayed

General: Low risk to adverse health effects.

Inhalation: Respiratory irritation or sore throat.

Skin Contact: Severe skin burns.

Eye Contact: The alkali 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 caustic vapours at high temperatures.

Explosion Hazard: No risk.

Reactivity: No risk.

Advice for Firefighters

Precautionary Measures Fire: Evaluate based on surrounding fire.

Firefighting Instructions: Evaluate based on surrounding fire.

Protection During Firefighting: Evaluate based on surrounding fire.

Hazardous Combustion Products: Oxides of Carbon, Caustic 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 safe acid solutions and flush to sanitary sewers if at pH 8.5.

For Non-Emergency Personnel

Protective Equipment: Wear impervious splash protection.

Emergency Procedures: Mop up small spills with water and flush to sanitary sewers. Large spills should be contained and reported immediately.

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 safe acid solutions and flush to sanitary sewers if the pH is below 8.5 and above 5.5.

Environmental Precautions

Methods and Material for Containment and Cleaning Up

For Containment: Water/oil absorbent pads.

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 for cleaning process.

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 1221 H.D. Hot Aqueous Immersion Cleaning of Mill Scale/Iron Oxide, Corrosion and Paint Stripping (Ready to Use) but primarily used to remove oil, grease, paint, rust and corrosion from ferrous metals.

Scan Label QR for Product Application Sheet and SDS for safe intended use.

Section 8: Exposure controls / personal protection

Control Parameters

ACGIH TLV: **15 mg/m³ (TWA) 175 ppm (SKIN 500 mg/m³ (INHALATION)**

OSHA PEL: **15 mg/m³ (TWA) 175 ppm (SKIN) 500 mg/m³ (INHALATION)**

Exposure Controls

Appropriate Engineering Controls: Adequate ventilation to meet exposure limits by removing the hazard from an inside or outside work environment. The chemical constituents of the cleaning solution does not evaporate.

Some Potassium Hydroxide may carry out in steam or vapour if solution is boiling vigorously

Personal Protective Equipment:



Other Information: Safety Glasses are always required. Alkali resistant GLOVES are always required. In confined wash areas with minimal ventilation use NIOSH approved respirators and splash protection for alkaline mist when rinsing parts.

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: **Detergent.**

Odour Threshold: **Not available.**

pH: **13**

Relative Evaporation Rate (butyl acetate=1): **0.3**

Melting Point: **Not applicable.**

Freezing Point: **0°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: **Not applicable.**

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

Relative Density (water=1): **1.03**

Solubility in Water: **Complete**

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

Viscosity: **20 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: **Reacts violently with strong acids.**

Chemical Stability: **Stable.**

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

Conditions to Avoid: **Strong oxidizers.**

Incompatible Materials: **White metals or their alloys: aluminum, magnesium, lead, tin, zinc, brass and babbitt.**

Hazardous Decomposition Products: **Hydrogen release from above metals.**

Section 11: Toxicological information

Information on Toxicological Effects - Product

Acute Toxicity: **Not available.**

LD₅₀ Data (Species-Route): **273 mg/kg(Rat - oral).**

LC₅₀ Data (Species-Route): **Not available.**

Skin Corrosion/Irritation: **Severe irritant: Human/Rabbit 50 mg/24hrs**

Serious Eye Damage/Irritation: **Moderate corneal injury: Rabbit 1 mg/24hrs**

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: **Slight irritation/redness observation.**

Symptoms/Injuries After Eye Contact: **Tearing, Stinging/dry 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: **Not applicable when used as directed.**

Mobility in Soil: **Neutralizes and turns to salt in 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: CORROSIVE LIQUID, N.O.S. (Potassium hydroxide)

Hazard Class: 8

Identification Number: UN1760

Packing Group: III

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: 2023-02-28

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.