

Safety Data Sheet

Section 1: Product identification and use

Product Identifier:

TCI 1134 H.D.

Process Identifier:

Hot caustic ultra-sonic assist radiator boil-out immersion cleaner

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: Oral - Category 3
Skin Corrosion/Irritation - Category 1A
Serious Eye Damage/ Eye Irritation - Category 1
Aquatic Toxicity (Acute) - Category 3
Aquatic Toxicity (Chronic) - Category 2
Corrosive To Metals—Category 1

Pictograms



Signal Word

Danger

Hazard Statements

H290—May be corrosive to metals.
H301—Toxic if swallowed.
H314—Causes severe skin burns and eye damage.
H318—Causes serious eye damage.
H402—Harmful to aquatic life.
H411—Toxic to aquatic life with long-lasting effects.

Precautionary Statements

P234—Keep only in original container.
P260—Do not breathe dust.
P264—Wash skin thoroughly after handling.
P270—Do not eat, drink or smoke when using this product.
P273—Avoid release to the environment.
P280—Wear protective gloves, protective clothing, eye protection and face protection.
P301+P310—IF SWALLOWED: Immediately call a hospital emergency department doctor.
P301+P330+P331—IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352—IF ON SKIN: Immediately apply a 5% vinegar solution. Wash with water.
P304+P340—IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303+P361+P353—IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water or mild vinegar solution and shower.
P305+P351+P338—IF IN EYES: Remove contact lenses if present and easy to do. Rinse cautiously with water or saline solution for several minutes – continue rinsing.
P310—Immediately call a hospital emergency department doctor.
P321—Specific treatment (Immediately apply a 5% vinegar solution) Then wash with water.
P330—Rinse mouth.
P361+P364—Take off immediately all contaminated clothing and wash it before reuse.
P363—Wash contaminated clothing before reuse.
P390—Absorb spillage to prevent material damage.
P391—Collect spillage.
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 |
|---------------------|
| Sodium Hydroxide |
| Sodium metasilicate |
| Sodium Carbonate |

CAS NUMBER

| |
|-----------|
| 1310-73-2 |
| 6834-92-0 |
| 497-19-8 |

CONCENTRATION [%]

| |
|--------|
| 60-100 |
| 7-13 |
| 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 vapors 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 vapors.

Section 6: Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Wear dust mask 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 dust mask 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 dust mask 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 absorbant 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 plastic containers.

Incompatible Materials: Do not mix with other cleaners.

Special Rules on Packaging: Consult Manufacturer or Supplier.

Specific End Use(s) TCI 1134 H.D. Ferrous Metal Hot Aqueous Immersion Degreaser, Rust, Scale, Paint Stripper and Corrosion Inhibitor is used to dissolve coolant sludge and soils from automotive internal and external radiator parts by the immersion method in the radiator rebuilding industry without adversely compromising the integrity of the tools. See Product Application Sheet or label QR 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.

Personal Protective Equipment:



Other Information: Alkali resistant GLOVES are always required.

Section 9: Physical and chemical properties

Information on Basic Physical and Chemical Properties

Physical State: Solid.

Appearance: Slight tint of amber.

Odour: Detergent.

Odour Threshold: Not available.

pH: 14 (1% aqueous solution)

Relative Evaporation Rate (butylacetate=1): Not applicable.

Melting Point: Not applicable.

Freezing Point: Not applicable.

Boiling Point: Not applicable.

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): Not applicable.

Solubility in Water: Complete

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

Viscosity: Not applicable.

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 and hot water.

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 to severe burns observation.

Symptoms/Injuries After Eye Contact: Burns with tinging/scaly sensation if not immediately neutralized with mild acidic buffer solution. Tearing/Redness are immediate symptoms.

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.

Ontario Provincial Waste Class: 122 C Alkaline solutions, sludges and residues containing other metals and non-metals, not containing cyanides.

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: UN1759, CORROSIVE SOLID, N.O.S., (Sodium Hydroxide), Class 8, PG III

Hazard Class: 8

Identification Number: UN1759

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: 2023-03-01

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.