

Safety Data Sheet

Section 1: Product identification and use

Product Identifier:

TCI 525-25 H.D.

Process Identifier:

Stainless steel cleaner/polish/passivator 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

Acute Toxicity: Category 1 & 2

Skin Corrosion/Irritation: Category 1A

Eye Damage/Irritation: Category 1

Pictograms



Signal Word

DANGER

Hazard Statements

H290 May be corrosive to metal.

H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

Precautionary Statements

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

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

P284 Wear respiratory protection.

P301 + P310 + P330 IF SWALLOWED: Immediately call POISON CENTER or doctor/physician. Rinse Mouth. Do not induce vomiting.

P303 + P361 + P353 IF ON SKIN OR HAIR Immediately remove all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call POISON CENTER or doctor/physician.

P305 + P351 + P338 IF IN EYES: Remove contact lenses. Rinse cautiously with water for several minutes. The acid solution can travel to the back of the eye ball and corrode the optic nerve if sprayed directly into the eyes.

P363 Wash contaminated clothing before reuse.

Section 3: Composition / information on ingredients

Hazardous Ingredients:

CHEMICAL NAME

Phosphoric acid

Hydrofluoric acid

CAS NUMBER

7664-38-2

7664-39-3

CONCENTRATION [%]

3-7

0.5-1.5

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 baking soda solution. Apply 2.5% Calcium Gluconate Gel and massage deep into the skin.

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: HIGH RISK adverse health effects.

Inhalation: Respiratory irritation or sore throat with ulceration possible.

Skin Contact: Causes severe skin burns which may not become apparent for several hours. Apply and massage with 2.5% Calcium Gluconate Gel. Seek immediate medical attention.

Eye Contact: Causes serious eye damage. 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 and ulceration 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: Oxides of Carbon, Acid vapors.

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 solutions for proper waste processing and disposal. For large spills use containment and dike.

Phone Number of your local authority for Emergency Spill Response:

For Emergency Personnel

Protective Equipment: Wear impervious spray/splash protection.

Emergency Procedures: Neutralize with copious amounts of water or alkaline solutions to achieve a neutral salt solution and contain for proper waste processing and disposal.

Environmental Precautions

Methods and Material for Containment and Cleaning Up

For Containment: Water absorbant pads.

Methods for Cleaning Up: Mop up small spills for proper waste processing and disposal.

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 when cleaning stainless steel or aluminum articles on equipment.

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 525-25 H.D. Stainless Steel Cleaner/Polish/Passivator is intended to clean, degrease and passivate stainless steel surfaces on a maintenance schedule and applied as is to dissolve and remove residual corrosion with high pressure cold water. See Product Application Sheet for safe intended use.

Section 8: Exposure controls / personal protection

Control Parameters

ACGIH TLV: **20 ppm (TWA)**
OSHA PO: **180 mg/m³ (STEL)**
NIOSH REL: **80 ppm (TWA)**

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 do not evaporate but can be atomized by spraying or misting.

Personal Protective Equipment:



Other Information: Acid resistant GLOVES are not 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: Blue, water clear.
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: Not applicable.
Relative Vapour Density at 20°C: Not applicable.
Relative Density (water=1): 1.07
Solubility in Water: Complete
Partition coefficient: n-octanol/water: Not applicable.
Viscosity: 1.5 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.
Incompatible Materials: Chlorine bleach and strong alkali.
Hazardous Decomposition Products: Hydrogen release from aluminum metal.

Section 11: Toxicological information

Information on Toxicological Effects - Product

Acute Toxicity: Not available.
LD₅₀ Data (Species-Route): 70 mg/kg (Rat - oral).
LC₅₀ Data (Species-Route): 7 mg/l (Rat - inhalation) 4hrs.
Skin Corrosion/Irritation: Redness/delayed 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: Irritation/redness/delayed burns.
Symptoms/Injuries After Eye Contact: Stinging, irreversible eye damage.
Symptoms/Injuries After Ingestion: Sore throat/burns/ulceration.
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 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: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (Phosphoric acid),
Hazard Class: 8
Identification Number: UN3264
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: 2023-03-02

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.