Safety Data Sheet

Section 1: Product identification and use

Product Identifier: **TCI 610 H.D.**

Process Identifier: Formaldehyde solution that contains 10–15% methanol as stabilizer

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
H301 + 311 + 331 Toxic if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H370 Causes damage to organs.

Precautionary Statements
P201 Obtain special instructions before use.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face 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 contaminate dclothing. 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.
P308 + P311 If exposed or concerned: Call a POISON CENTRE/doctor..

Section 3: Composition / information on ingredients

Hazardous Ingredients:	CHEMICAL NAME	CAS NUMBER	CONCENTRATION [%]
	Methanol	67-56-1	11
	Formaldehyde	50-00-0	37

Section 4: First aid measures

Description of First Aid Measures
General: Determine areas of exposure.
Inhalation: Excessive exposure - move the fresh air. As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) must be kept under medical observation even if no symptoms are (yet) manifested.
Skin Contact: Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear.
Eye Contact: Immediately hold eyelids apart and flush the eye continuously with running water for at least 15 minutes. Transport to hospital or doctor without delay.
Ingestion: Formaldehyde is highly corrosive . Seek immediate medical care. Do not induce vomiting.

Most Important Symptoms and Effects Both Acute and Delayed
General: HIGH RISK adverse health effects.
Inhalation: Formaldehyde is irritating to the mucous membranes of the respiratory tract.
Skin Contact: Contact with skin will result in severe irritation. Corrosive to skin – may cause skin burns. A skin sensitizer. Repeated or prolonged contact may lead to allergic contact dermatitis.
Eye Contact: A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain, convulsions and loss of consciousness. Seek medical attention.

Section 5: Fire-fighting measures

Extinguishing Media
Suitable Extinguishing Media: Use water and evaluate based on surrounding fire hazards.
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 vapours.

Section 6: Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Wear impervious splash protection.
For Non-Emergency Personnel
Protective Equipment: Wear impervious splash protection.
Emergency Procedures: Use absorbent (soil, sand or other inert material). Neutralize with aqueous ammonia 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: Use absorbent (soil, sand or other inert material). Neutralize with aqueous ammonia. for proper waste processing and disposal.
Environmental Precautions
Methods and Material for Containment and Cleaning Up
For Containment: Water absorbent pads and booms.
Methods for Cleaning Up: Mop up small spills for proper waste processing and disposal.

Section 7: Handling and storagePrecautions 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 equipment or fogging buildings.
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 610 H.D. Formaldehyde solution that contains 10–15% methanol as stabilizer is used as a foot bath for animals to prevent bacterial infections on hoofs.

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

Section 8: Exposure controls / personal protection

Control Parameters
ACGIH TLV: Formaldehyde - Ceiling 1 ppm (1.2mg/m^3)
OSHA-TWA Methyl Alcohol: 200ppm, 262 mg/m^3;
OSHA-STEL 250ppm, 328mg/m^3, skin absorption hazard, biologically hazardous.

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 always required. 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.
Odour: Pungent.
Odour Threshold: Not available.
pH: 2.8–4.0
Relative Evaporation Rate (butyl acetate=1): 0.3
Melting Point: Not applicable.
Freezing Point: -5°C
Boiling Point: 100°C.
Flash Point: 64–85°C.
Auto-ignition Temperature: 525°C.

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: 1.
Relative Density (water=1): 1.09–1.14
Solubility in Water: Miscible
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: Oxidizing agents and alkalis..

Incompatible Materials: Oxidizing agents and alkalis.
Hazardous Decomposition Products: At elevated temperatures, oxidation of formaldehyde produces formic acid.

Section 11: Toxicological information

Information on Toxicological Effects - Product
Acute Toxicity: Not available.
LD_{50} Data (Species-Route): 100 mg/kg (Rat - oral).
LC_{50} Data (Species-Route): 203mg/m^3 (Rat - inhalation) 4hrs.
Skin Corrosion/Irritation: Redness/delayed burns (Acute exposure).
Serious Eye Damage/Irritation: Stinging, Corneal injury (Acute exposure).
Respiratory or Skin Sensitization: Suspected.
Germ Cell Mutagenicity: Suspected.
Teratogenicity: Suspected.
Carcinogenicity: Suspected.

Specific Target Organ Toxicity (Repeated Exposure): Not available.
Reproductive Toxicity: 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/fatal.
Information on Toxicological Effects - Ingredients

Section 12: Ecological information

Toxicity: Not applicable when used as directed.
Mobility in Soil: Leaches into ground water and is biodegradable.

Other Adverse Effects
Other Information: When released into the air, this material is expected to have a half-life of less than 1 day.

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., (FORMALDEHYDE SOLUTIONS)
Hazard Class: 8
Identification Number: UN2209
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.