

# Safety Data Sheet

## Section 1: Product identification and use

**Product Identifier:**

# TCI 105 H.D.

**Process Identifier:**

**Non-aqueous long-life, biodegradable maintenance cleaning fluid**

**24 HOUR EMERGENCY ASSISTANCE:** 519-485-4370

**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 — Fax: 855-762-4446

**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 — Fax: 855-762-4446

## Section 2: Hazard identification

**GHS Classification**

Flammable Liquids: Category 3

Skin Corrosion/Irritation: Category 3

Serious Eye Damage/Eye Irritation: Category 2B

**Pictograms**



**Signal Word**

Warning

**Hazard Statements**

H226 Flammable liquid and Vapour.

H316 Causes mild skin irritation.

H320 Causes eye irritation.

**Precautionary Statements**

P210 Keep away from heat and sources of ignition. No Smoking.

P280 Wear protective gloves, eye protection.

P305+P351 + P338 IF IN EYES: Remove contact lenses. Rinse with cold water.

P337+P313 If eye irritation persists: Get medical advice/attention.

## Section 3: Composition / information on ingredients

**Hazardous Ingredients:**

**CHEMICAL NAME**

1-methyl-4-(1-methylethenyl) cyclohexane  
Aliphatic solvent

**CAS NUMBER**

5989-27-5  
90622-58-5

**CONCENTRATION [%]**

5-10  
60-80

## Section 4: First aid measures

**Description of First Aid Measures**

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

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

**Skin Contact:** Wash with cold water.

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

**Ingestion:** 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 and possible dizziness.

**Skin Contact:** Irritation caused by defatting of skin.

**Eye Contact:** Itching irritation, redness.

**Ingestion:** Burning sensation with gastrointestinal irritation.

## Section 5: Fire-fighting measures

**Extinguishing Media**

**Suitable Extinguishing Media:** Water spray or Dry chemical.

**Unsuitable Extinguishing Media:** Not available.

**Special Hazards Arising From the Substance or Mixture**

**Fire Hazard:** Know the Fire Extinguisher location at your workstation.

**Explosion Hazard:** None under normal conditions. Volatile when heated. Keep away from High Energy Ignition Sources.

**Reactivity:** Stable under normal conditions.

**Advice for Firefighters**

**Precautionary Measures Fire:** Solvent emulsifies with Water. Solvent will not float on water. Water reduces the spread of fire.

**Firefighting Instructions:** Keep the container cool.

**Protection During Firefighting:** Wear self-contained breathing apparatus for fire-fighting if necessary.

**Hazardous Combustion Products:** Oxides of Carbon and particulate matter in smoke.

## Section 6: Accidental release measures

**Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures:** Spills on floors are slippery.

**For Non-Emergency Personnel**

**Protective Equipment:** Non-slip footwear, safety glasses and protective gloves.

**Emergency Procedures:** Ventilate area if indoor temperatures reach 30°C plus. Mop up small spills and dispose to sanitary sewer.

Use Non-Sparking equipment. Large spills are not likely but should be contained and resultant waste properly classified prior to disposal (See Section 13).

**PHONE NUMBER of your local authority for Emergency Spill Response:**

**For Emergency Personnel**

**Protective Equipment:** Non-slip footwear, safety glasses and protective gloves.

**Emergency Procedures:** Ventilate area if indoor temperatures reach 30°C plus.

**Environmental Precautions**

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

**For Containment:** Stop mobility with oil absorbant.

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

Use Non-Sparking equipment. Large spills are not likely but should be contained and resultant waste properly classified prior to disposal (See Section 13).

## Section 7: Handling and storage

**Precautions for Safe Handling**

**Additional Hazards When Processed:** None when stored in non-sparking metal parts washer. 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 or degreasing parts.

**Conditions for Safe Storage, Including Any Incompatibilities**

**Technical Measures:** Provide sufficient air exchange in work rooms.

**Storage Conditions:** Only stored in parts washers away from excessive heat.

**Incompatible Materials:** Water will deactivate the solvent's cleaning performance.

Long term exposure will affect Natural Rubber and most paint coatings.

This product has an approved dedicated application.

Consult Manufacturer or Supplier for compatibility.

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

**Specific End Use(s)** TCI 105 H.D. Non-Aqueous - Long Life - Biodegradable - Rebuild/Maintenance Cleaning Fluid is for cleaning all soil compositions found in automotive rebuild and industrial maintenance.

See Product Application Sheet for the safe intended use.

## Section 8: Exposure controls / personal protection

### Control Parameters

ACGIH TLV: 865mg/m<sup>3</sup> (TWA)

OSHA PEL: 400 ppm (SKIN) 865mg/m<sup>3</sup> (INHALATION)

### Exposure Controls

**Appropriate Engineering Controls:** Adequate ventilation to meet exposure limits by removing the hazard from the work environment.

### Personal Protective Equipment:



**Other Information:** Handle in accordance with good hygiene and safety practices and procedures. Solvent resistant gloves should be selected and worn.

## Section 9: Physical and chemical properties

### Information on Basic Physical and Chemical Properties

**Physical State:** Liquid.

**Appearance:** Amber.

**Odour:** Clean orange aroma.

**Odour Threshold:** 1 ppm

**pH:** Neutral.

**Relative Evaporation Rate (butylacetate=1):** 0.09

**Melting Point:** Not applicable.

**Freezing Point:** - 65°C

**Boiling Point:** 195°C

**Flash Point:** 61°C.

**Auto-ignition Temperature:** 225°C

**Decomposition Temperature:** Not determined.

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

**Lower Flammable Limit:** 1.2% by volume

**Upper Flammable Limit:** 9.3% by volume

**Vapour Pressure:** 0.39 mmHg @ 20°C

**Relative Vapour Density at 20°C:** > 1

**Relative Density (water = 1):** 0.8

**Solubility in Water:** Emulsion.

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

**Viscosity:** 1.27 centipoise

**Explosion Data - Sensitivity to Mechanical Impact:** No

**Explosion Data - Sensitivity to Static Discharge:** Yes

## Section 10: Stability and reactivity

**Reactivity:** Stable.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** No decomposition under normal degreasing/cleaning conditions.

**Conditions to Avoid:** Excessive heat, flames and sparks.

**Incompatible Materials:** Strong Oxidizing Agents.

**Hazardous Decomposition Products:** Oxides of Carbon and particulate matter in smoke.

## Section 11: Toxicological information

### Information on Toxicological Effects—Product

**Acute Toxicity:** > 5,000mg/kg

**LD<sub>50</sub> Data (Species—Route):** RAT - oral: 4.4 g/kg RABBIT - dermal: 5 g/kg

**LC<sub>50</sub> Data (Species—Route):** RAT - inhalation: > 5.9 g/m<sup>3</sup> over 4hrs

**Skin Corrosion/Irritation:** Mild irritation with prolonged exposure defatting.

**Serious Eye Damage/Irritation:** May cause mild, short-lasting discomfort.

**Respiratory or Skin Sensitization:** Possible in some susceptible individuals.

**Germ Cell Mutagenicity:** No available evidence.

**Teratogenicity:** No available evidence.

**Carcinogenicity:** No available evidence.

**Specific Target Organ Toxicity (Repeated Exposure):** No available evidence.

**Reproductive Toxicity:** No available evidence.

**Specific Target Organ Toxicity (Single Exposure):** No available evidence.

**Aspiration Toxicity Hazard:** Chemical pneumonitis or pulmonary edema.

**Symptoms/Injuries After Inhalation:** No available evidence.

**Symptoms/Injuries After Skin Contact:** None

**Symptoms/Injuries After Eye Contact:** Stinging/Itching/Redness

**Symptoms/Injuries After Ingestion:** Gastrointestinal irritation and diarrhea.

**Information on Toxicological Effects—Ingredients**

All ingredients synergistically defat or dry out skin temporarily.

## Section 12: Ecological information

**Toxicity:** Not expected to be harmful to aquatic organisms or demonstrate chronic toxicity. None of the ingredients are hazardous atmospheric pollutants.

**Mobility in Soil:** Expected to be readily biodegradable.

### Other Adverse Effects

**Other Information:** VOC's (EPA method 24) 770g/L.

## 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:** 213 I

## Section 14: Transport information

### LIMITED CONTAINER QUANTITY EXEMPTION: 5 L

TDGA CANADA - DANGEROUS GOODS: NOT-REGULATED

49 CFR (USA) DANGEROUS GOODS: NOT-REGULATED

IMDG (VESSEL) DANGEROUS GOODS: NOT-REGULATED

IATA (CARGO AIR) DANGEROUS GOODS: NOT-REGULATED

IMDG (PASSENGER AIR) DANGEROUS GOODS: NOT-REGULATED

### CONTAINER QUANTITIES EXCEEDING: 5 L

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

**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S.

**Hazard Class:** CLASS 3 Identification Number: UN1993 Packing Group: III

**Label/Placard Codes:** 3



## 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:** 2018-04-17

**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.