

Safety Data Sheet

Section 1: Product identification and use

Product Identifier:

TCI 101 H.D.

Process Identifier: Broad spectrum ready to use heavy duty biodegradable & versatile solvent degreaser

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

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.
P233—Keep container tightly closed.
P240—Ground/bond container and receiving equipment.
P241—Use explosion-proof electrical handling equipment same as fuel pumps.
P242—Use only non-sparking tools.
P243—Take precautionary measures against static discharge.
P264—Wash hands and contact surfaces thoroughly after handling.
P280—Wear protective gloves, eye protection.
P303+P361+P353—IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with running water or shower.
P305+P351+P338—IF IN EYES: Remove contact lenses. Rinse with cold water.
P332+P313—If skin irritation occurs: Get medical advice or attention.
P337+P313—If eye irritation persists: Get medical advice or attention.
P370+P378—In case of fire: Use water spray or dry chemical to extinguish.
P403+P235—Store in a well ventilated place. Keep cool.
P501—Dispose of contents with water rinse to sewer. Dispose container to plastic recycling facility in accordance with local or regional or national/international regulation.

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 [%]

1-5
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.

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 firefighting 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. No threat of large spills exist. **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. Product is only utilized in contained quantities. No threat of large spills exist.

Section 7: Handling and storage

Precautions for Safe Handling

Additional Hazards When Processed: None.

Hygiene Measures: Do not eat, drink or smoke while using this product.

Personal Protection Equipment required when cleaning equipment.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Provide sufficient air exchange in work areas.

Storage Conditions: Only stored in original containers away from excessive heat.

Incompatible Materials: Water will deactivate the solvent's cleaning performance and chemical activity. Long time ie. 100 hours of exposure will affect Natural Rubber and most paint coatings. Short term and repeated exposure are safe on all water safe surfaces.
Special Rules on Packaging: Consult Manufacturer or Supplier.

Specific End Use(s) TCI 101 H.D. is a Broad Spectrum Ready To Use Heavy Duty Biodegradable versatile Solvent Degreaser for cleaning all soil compositions found in agricultural, automotive, aviation, and industrial maintenance requirements.
See Product Application Sheet or Label QR for safe intended use.

Section 8: Exposure controls / personal protection

Control Parameters

ACGIH TLV: 865mg/m³ (TWA)

Exposure Controls

Appropriate Engineering Controls: Adequate ventilation to meet exposure limits by removing the hazard from an inside or outside 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: 58°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

LD₅₀ Data (Species—Route): RAT - oral: 4.4 g/kg RABBIT - dermal: 5 g/kg

LC₅₀ Data (Species—Route): RAT - inhalation: > 5.9 g/m³ 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: No available evidence.

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 skin and lead to dermatitis complications.

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: 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: FLAMMABLE LIQUID, N.O.S.(1-methyl-4-(1-methylethenyl) cyclohexane)

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

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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.