# Safety Data Sheet

## Section 1: Product identification and use

**Product Identifier:** **TCI 108 H.D.**

**Process Identifier:** Natural food grade orange solvent high dielectric strength parts cleaner/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
Aspiration Hazard: Category 2
Skin Corrosion/Irritation: Category 2
Serious Eye Damage/Eye Irritation: Category 2B
Toxic To Aquatic Life: Category: 1

**Pictograms**

**Signal Word**
Warning

**Hazard Statements**
H226—Flammable liquid and Vapour.
H305—May be fatal if swallowed and enters airways.
H315—Causes skin irritation.
H320—Causes eye irritation.
H317—May cause an allergic skin reaction.
H410—Very toxic to aquatic life with long lasting effects.

**Precautionary Statements**
P210—Keep away from heat and sources of ignition. No Smoking.
P233—Keep container tightly closed.
P240—Ground or bond container and receiving equipment.
P241—Use explosion-proof handling equipment.
P242—Use only non-sparking tools.
P243—Take precautionary measures against static discharge.
P264—Wash skin contact thoroughly after handling.
P273—Avoid release into the environment.
P280—Wear protective gloves and eye protection.
P301+P310—IF SWALLOWED: Immediately call the hospital emergency department doctor.
P302+P352—IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353—IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water in a shower if available.
P305+P351+P338—IF IN EYES: Rinse cautiously with water or saline solution for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P321—Specific treatment (use moisturizing ointments or drops).
P331—Do NOT induce vomiting.
P332+P313—If skin irritation occurs: Get medical advice or attention.
P337+P313—If eye irritation persists get medical advice or attention.
P362+P364—Take off contaminated clothing and wash with detergent before reuse.
P370+P378—In case of fire: Use (See Section 5) to extinguish.
P391—Collect spillage.
P403+P235—Store in a well ventilated place. Keep cool.
P405—Store locked up.
P501—Dispose of contents in accordance with local/regional/national/international regulation. Dispose container to recycling.

## Section 3: Composition / information on ingredients

| Hazardous Ingredients: | CHEMICAL NAME | CAS NUMBER | CONCENTRATION [%] |
|---|---|---|---|
| | 1-methyl-4-(1-methylethenyl) cyclohexane | 5989-27-5 | 80–100 |

## 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 will float on water. Water promotes the spreading of a 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.
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 absorbent.
**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:** Dispose of rags or accumulated lint in recovery or salvage containers for flammable liquids that meet fire safety codes and regulations. 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 parts by brushing.
**Conditions for Safe Storage, Including Any Incompatibilities**
**Technical Measures:** Provide sufficient air exchange in work areas.
**Storage Conditions:** Only stored in original containers with vented caps away from excessive heat.

**Incompatible Materials:** 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.

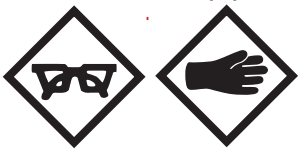
**Specific End Use(s)** **TCI 108 H.D.** Natural Orange High Dielectric Strength (27,000 Volts) Parts Cleaning Solvent is for film free cleaning of all soil compositions found in automotive and industrial maintenance operations.

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

## Section 8: Exposure controls / personal protection

Control Parameters
**ACGIH TLV:** 865mg/m$^3$ or 30 ppm (8hrs) (TWA)
**Exposure Controls**
**Appropriate Engineering Controls:** Adequate ventilation to meet exposure limits by removing the hazard from the work environment. If adequate ventilation is not available use NIOSH approved air purifying respirator with organic vapor cartridge or canister.

**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:** Light amber.
**Odour:** Clean orange aroma.
**Odour Threshold:** 1 ppm
**pH:** Neutral.
**Relative Evaporation Rate (butylacetate=1):** 0.2
**Melting Point:** Not applicable.
**Freezing Point:** –78°C
**Boiling Point:** 176°C
**Flash Point:** 43°C
**Auto-ignition Temperature:** 237°C

**Decomposition Temperature:** Not determined.
**Flammability (solid/gas):** Not determined.
**Lower Flammable Limit:** 0.7% by volume
**Upper Flammable Limit:** 6.1% by volume
**Vapour Pressure:** < 2 mmHg @ 20°C
**Relative Vapour Density at 20°C:** > 1
**Relative Density (water = 1):** 0.85
**Solubility in Water:** No.
**Partition coefficient: n-octanol/water:** Not determined.
**Viscosity:** 0.923 centipoise
**Explosion Data – Sensitivity to Mechanical Impact:** No
**Explosion Data – Sensitivity to Static Discharge:** High Energy Ignition Sources.

## Section 10: Stability and reactivity

**Reactivity:** Stable.
**Chemical Stability:** Stable under normal conditions.
**Possibility of Hazardous Reactions:** No decomposition under normal cleaning conditions.

**Conditions to Avoid:** Excessive heat, flames and sparks.
**Incompatible Materials:** Strong Oxidizing Agents.
**Hazardous Decomposition Products:** None under normal conditions of applications.

## Section 11: Toxicological information

Information on Toxicological Effects—Product
**Acute Toxicity:** > 5,000mg/kg
**$LD_{50}$ Data (Species-Route):** RAT - oral: >5 g/kg RABBIT - dermal: >5 g/kg
**$LC_{50}$ Data (Species-Route):** RAT - inhalation: > 5.9 g/m$^3$ 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:** Itching/Redness
**Symptoms/Injuries After Ingestion:** Gastrointestinal irritation and diarrhoea.
Information on Toxicological Effects—Ingredients
All ingredients synergistically defat skin and may lead to dermatitis complications.

## Section 12: Ecological information

**Toxicity:** Extremely harmful to aquatic organisms and 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:** TERPENE HYDROCARBONS, N.O.S. (1-methyl-4-(1-methylethenyl) cyclohexane
**Hazard Class:** CLASS 3
**Identification Number:** UN2319
**Packing Group:** III
**Label/Placard Codes:** 3

## ction 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.