Safety Data Sheet

Section 1: Product identification and use

Product Identifier: **TCI 2002-70 H.D.**

Process Identifier: Isopropyl alcohol (70%)

24 H 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

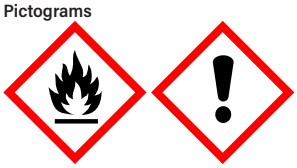
Supplier's name and address:

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 2
Specific Target Organ Toxicity, Single Exposure—Category 3
Eye Irritation—Category 2A

Pictograms



Signal Word
Danger

Hazard Statements
H225—Highly flammable liquid and vapour.
H319—Causes serious eye irritation.
H335—May cause respiratory irritation.
H336—May cause drowsiness or dizziness.

Precautionary Statements
P102—Keep out of reach of children.
P210—Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233—Keep container tightly closed.
P240—Ground and bond container and receiving equipment.
P241—Use explosion proof electrical ventilating, lighting and service equipment.
P242—Use non-sparking tools.
P243—Take precautionary measures against static discharge.
P261—Avoid breathing mist and spray.
P264—Wash hands thoroughly after handling.
P270—Do not eat, drink or smoke when using this product.
P271—Use only outdoors or in a well-ventilated area.
P280—Wear protective gloves and eye protection.
P303+P361+P353—IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340—IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338—IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P308+P311—If exposed or concerned: Call a doctor at local hospital emergency department if you feel unwell.
P312—Call a doctor at local hospital emergency department if you feel unwell.
P337+P313—If eye irritation persists get medical advice or attention.
P370+P378—In case of fire: Use water spray to extinguish.
P403+P233—Store in a well ventilated place. Keep container tightly closed.
P403+P235—Store in a well ventilated place. Keep cool.
P405—Store locked up.
P501—Dispose of contents in accordance with local, regional, national and international government regulations. Return container to supplier for recycling.

Section 3: Composition / information on ingredients

Hazardous Ingredients:	CHEMICAL NAME	CAS NUMBER	CONCENTRATION [%]
	Isopropanol	67-63-0	60 - 80

Section 4: First aid measures

Description of First Aid Measures
General: Get medical advice/attention if feeling unwell. Take SDS to attending medial staff.
Inhalation: Excessive exposure - move the fresh air. If breathing has stopped or is laboured give oxygen or artificial respiration if needed..
Skin Contact: Remove contaminated clothing. 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.
Immediately call a POISON CONTROL CENTER/doctor

Most Important Symptoms and Effects Both Acute and Delayed
General: Get medical advice/attention if feeling unwell. Take SDS to attending medial staff.
Inhalation: Respiratory irritation and possible headache, dizziness and nausea.
Skin Contact: Fast evaporating.
Eye Contact: Itching irritation, redness.
Ingestion: Harmful if swallowed. Gastrointestinal irritation, vomiting and diarrhoea.

Section 5: Fire-fighting measures

Extinguishing Media
Suitable Extinguishing Media: Dry chemical. Water Spray. Foam. Carbon dioxide.
Unsuitable Extinguishing Media: Water is effective.
Special Hazards Arising From the Substance or Mixture
Fire Hazard: Extremely flammable. 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: Remove all sources of ignition. Ventilate area.
Isopropanol can burn with an invisible flame.
Firefighting Instructions: Keep the product container cool with water spray.
Protection During Firefighting: Wear full protective gear including flame retardant coat. Wear self-contained breathing apparatus for fire fighting if necessary.
Hazardous Combustion Products: Oxides of Carbon.

Section 6: Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Spills on floors are slippery. Use non-sparking tools.
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. Eliminate all sources of ignition. Mop up small spills and dispose to sanitary sewer or evaporate to air.
Use Non-Sparking equipment. Large spills should be contained and reported immediately.
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: Eliminate all sources of ignition. Ventilate area if indoor temperatures reach 30°C plus. Take precautionary measures against static discharge.
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: Take precautionary measures against static discharge.
Dispose of wipes in recovery or salvage containers for flammable liquids that meet fire safety codes and regulations. Ground container with high conductive clamp on cables when transferring liquid to eliminate static electric sparks.
See GHS WORKPLACE LABEL in your work area.
Hygiene Measures: Do not eat, drink or smoke while using this product.
Personal Protection Equipment required.
Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Provide sufficient air exchange in work areas or best to use outdoors only

Storage Conditions: Only stored in original containers with vented caps away from excessive heat in a well ventilated area.
Incompatible Materials: This product has a safe approved dedicated application.
Consult Manufacturer or Supplier for compatibility.
Special Rules on Packaging: Consult Manufacturer or Supplier
.
Specific End Use(s) **TCI 2002-70 H.D.** is >70% ISOPROPYL ALCOHOL
Scan Label QR for Product Application Sheet and SDS for safe intended use.

Section 8: Exposure controls / personal protection

Control Parameters
ACGIH TLV (STEL) 400 ppm or 980mg/m^3
NIOSH TLV (STEL) 500 ppm or 1.225mg/m^3
ACGIH TLV (TWA) 200 ppm

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 vapour cartridge or canister.
BIOLOGICAL LIMIT VALUES: 40 mg/l as acetone end of shift at the end of work week

Personal Protective Equipment:

Other Information: Handle in accordance with good hygiene and safety practices and procedures. Nitrile solvent resistant gloves should be selected and worn if necessary.

Section 9: Physical and chemical properties

Information on Basic Physical and Chemical Properties
Physical State: Liquid.
Appearance: Clear.
Odour: Rubbing alcohol.
Odour Threshold: Not determined.
pH: Not applicable.
Relative Evaporation Rate (n-butyl acetate=1): 2.8
Melting Point: Not applicable.
Freezing Point: -88°C
Boiling Point: 82°C
Flash Point: 12°C
Auto-ignition Temperature: 399°C
Decomposition Temperature: Not determined.
Flammability (solid/gas): Flammable
Lower Flammable Limit: 2% by volume
Upper Flammable Limit: 12.7% by volume
Vapour Pressure: 45 mmHg @ 25°C
Relative Vapour Density at 20°C: 2.1
Relative Density (water = 1): 0.79
Solubility in Water: Complete.
Partition coefficient: n-octanol/water: Log Kow 0.05.
Viscosity: Not determined.
Explosion Data – Sensitivity to Mechanical Impact: No.
Explosion Data – Sensitivity to Static Discharge: High Energy Ignition Sources.

Section 10: Stability and reactivity

Reactivity: Vapours may form explosive mixtures with air.
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 and Reducing Agents.
Hazardous Decomposition Products: Oxides of Carbon.

Section 11: Toxicological information

Information on Toxicological Effects—Product
Acute Toxicity: > 15,000mg/kg
LD_{50} Data (Species-Route): RAT - oral: > 5 g/kg RABBIT - dermal: > 12.8 g/kg
LC50 Data (Species-Route): RAT - inhalation: > 130 g/m3 over 4hrs
Skin Corrosion/Irritation: Mild irritation, drying or cracking with prolonged exposure.
Serious Eye Damage/Irritation: May serious eye irritation with severe pain and discomfort.
Respiratory or Skin Sensitization: Not a skin sensitizer.
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 oedema.
Symptoms/Injuries After Inhalation: Narcotic effect, respiratory tract irritation.
Symptoms/Injuries After Skin Contact: None or mild irritation.
Symptoms/Injuries After Eye Contact: Itching/Redness
Symptoms/Injuries After Ingestion: Gastrointestinal irritation, vomiting and diarrhoea.
Information on Toxicological Effects—Ingredients
None known.

Section 12: Ecological information

Toxicity: Low acute toxicity to aquatic organisms and demonstrates no bioaccumulation. None of the ingredients are hazardous atmospheric pollutants.
Mobility in Soil: Hi mobility in soil and expected to be readily biodegradable.

Other Adverse Effects
Other Information: VOC's (EPA method 24) 790g/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: ISOPROPYL ALCOHOL
Hazard Class: CLASS 3
Identification Number: UN1219
Packing Group: II
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: 2023-02-28

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.