

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: 71-23-8
Product Name: N-PROPANOL
Revision Date: Aug 21, 2018 **Date Printed:** Aug 22, 2018
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Thames River Chemical Corp.
Address: 5230 Harvester Road Burlington, ON, CA, L7L 4X4
Emergency Phone: CHEMTREC (800) 424-9300
Information Phone Number: 905-681-5353
Fax: 905-681-5377
Product/Recommended Uses: For laboratory or industrial use only.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Flammable Liquids - Category 2

Serious Eye Damage - Category 1

Specific Target Organ Toxicity -Single Exposure (Narcotic Effects) - Category 3

Pictograms



Signal Word

Danger

Hazard Statements - Health

Causes serious eye damage

May cause drowsiness or dizziness

Hazard Statements - Physical

Highly flammable liquid and vapor

Precautionary Statements - General

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical, ventilating, lighting equipment.

Use only non-sparking tools.
Take action to prevent static discharges.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.

Precautionary Statements - Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
In case of fire: Use carbon dioxide, alcohol foam, water spray or dry chemical to extinguish.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor, if you feel unwell.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.
Store in a well-ventilated place. Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/national/international regulation. Waste management should be in full compliance with national, regional and local laws.

Physical Hazards Not Otherwise Classified

No Data Available

Health Hazards Not Otherwise Classified

No Data Available

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000071-23-8	PROPYL ALCOHOL	100%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Call a physician immediately.
Remove source of exposure or move person to fresh air and keep comfortable for breathing. Eliminate all ignition sources if safe to do so. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

Eye Contact

If eye irritation persists: Get medical advice/attention. Cautiously rinse eyes with lukewarm, gently flowing water for 15 minutes, while holding the eyelids open.

Skin Contact

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Store contaminated clothing under water and wash before re-use or discard. Rinse skin with water/shower and mild soap for 5 minutes or until product is removed.

Ingestion

If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects, Both Acute and Delayed

No Data Available

Indication of Any Immediate Medical Attention and Special Treatment Needed

No Data Available

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

May form an ignitable vapor/air mixture in closed tanks or containers. Runoff to sewer may create fire or explosion hazard. Vapors may form explosive mixtures with air Vapors may travel to source of ignition and flashback Vapors will spread along ground and collect in low or confined areas (sewers, basements, tanks) Fire will produce irritating gases.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Move undamaged containers from immediate hazard area if it can be done safely. Stop spill/release if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product has a low flashpoint: Use of water spray when fighting fire may be inefficient. Large Fire: Dike fire-control water for later disposal; do not scatter the material

Special Protective Actions

Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Evacuate and isolate hazard area and keep unauthorized personnel away. A vapor-suppressing foam may be used to reduce vapors.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor or mist. Avoid contact with skin, eye or clothing.

Environmental Precautions

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Stop spill/release if it can be done safely. Dike far ahead of liquid spill for later disposal.

Methods and Materials for Containment and Cleaning up

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non-sparking tools to collect absorbed material. Ventilate area after clean-up is complete.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. All containers must be properly labelled.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. Report ventilation failures immediately. The use of

local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Store in dry, cool areas, out of direct sunlight and away from other sources of heat. Empty container retain residue and may be dangerous. Keep containers securely sealed when not in use. Bond and ground metal containers/cylinders when transferring. Avoid storing in direct sunlight or near other heat sources; eliminate all sources of ignition. Avoid storing in basements.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear indirect-vent, impact and splash resistant goggles when working with liquids

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	CANsmg	CANppm	CANtmg	CANtppm	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Skin designation	ACGIH STEL (mg/m3)
PROPYL ALCOHOL	615	250	491	200			500	200		1		

Chemical Name	ACGIH STEL (ppm)	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH TLV Basis	ACGIH Carcinogen	ACGIH Notations
PROPYL ALCOHOL			100	Eye & URT irr	A4	A4

A4 - Not Classifiable as a Human Carcinogen, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	6.72 lb/gal
Specific Gravity	0.81
Appearance	clear colorless liquid
Odor Description	musty odor like rubbing alcohol
Odor Threshold	<0.07-100
pH	N/A
Melting/Freezing Point	-126.1 °C
Low Boiling Point	N/A
High Boiling Point	N/A

Flash Point	25 °C
Vapor Pressure	N/A
Vapor Density	N/A
Evaporation Rate	N/A
Upper Explosion Level	N/A
Lower Explosion Level	N/A
Water Solubility	1000000 mg/L (at 25 °C)
Coefficient Water/Oil	N/A
Viscosity	N/A

SECTION 10) STABILITY AND REACTIVITY

Reactivity

No Data Available

Stability

Stable under normal storage and handling conditions.

Conditions to Avoid

Heat, flames and sparks. Avoid temperatures above 35°C, direct sunlight and contact with sources of heat.

Hazardous Reactions/Polymerization

Hazardous polymerization will not occur. Vapours may form explosive mixture with air.

Incompatible Materials

Can react with strong oxidizers, inorganic acids, and halogens.

Hazardous Decomposition Products

No Data Available

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure

Inhalation, ingestion, skin absorption

Acute Toxicity

No Data Available

Aspiration Hazard

No Data Available

Carcinogenicity

No Data Available

Germ Cell Mutagenicity

No Data Available

Reproductive Toxicity

No Data Available

Respiratory/Skin Sensitization

No Data Available

Serious Eye Damage/Irritation

Causes serious eye damage

Skin Corrosion/Irritation

No Data Available

Specific Target Organ Toxicity - Repeated Exposure

No Data Available

Specific Target Organ Toxicity - Single Exposure

May cause drowsiness or dizziness

0000071-23-8 PROPYL ALCOHOL

LC50 (rat): approximately 4000 ppm (4-hour exposure); 2/6 animals died (1)

LD50 (oral, rat): 1870 mg/kg (1)

LD50 (oral, young female rat): 660 mg/kg (3)

LD50 (oral, young male rat): 560 mg/kg (3)

LD50 (oral, rabbit): 2820 mg/kg (2)

LD50 (dermal, rabbit): 4000 mg/kg (cited as 5.04 mL/kg) (1)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

No Data Available

Mobility in Soil

No Data Available

Bio-accumulative Potential

No Data Available

Persistence and Degradability

No Data Available

Other Adverse Effects

No Data Available

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, provincial and local laws.

SECTION 14) TRANSPORT INFORMATION

Transport Canada Information

UN number: UN 1274

shipping name: n-Propanol

Hazard class: 3

Packaging group: III

U.S. DOT Information

UN number: UN 1274
shipping name: n-Propanol
Hazard class: 3
Packaging group: III

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000071-23-8	PROPYL ALCOHOL	100% - 100%	DSL,TSCA,EU_EC_Inventory_DoNotUse

SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CANsmg or CANspmm - Canadian Short Term Exposure Level in mg/L or in ppm; CANTmg or CANTppm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

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