

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number:	67-63-0		
Product Name:	Isopropyl Alcohol 70%		
Revision Date:	Dec 19, 2019	Date Printed:	Dec 19, 2019
Version:	1.0	Supersedes Date:	N.A.
Manufacturer's Name:	Thames River Chemical Corp.		
Address:	5230 Harvester Road Burlington, ON, C	A, L7L 4X4	
Emergency Phone:	CHEMTREC (800) 424-9300		
Information Phone Numbe	er: 905-681-5353		
Fax:	905-681-5377		

Product/Recommended Uses: For laboratory or industrial use only.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Eye Irritation - Category 2A

Flammable Liquids - Category 2

Skin Irritation - Category 3

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

Pictograms



Danger

Hazard Statements - Health

Causes serious eye irritation

Causes mild skin irritation

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

Wash/Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

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.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

In case of fire: Use carbon dixoxide, alcohol foam, water spray or dry chemical to extinguish.

If skin irritation occurs: Get medical advice/attention.

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 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
0000067-63-0	ISOPROPYL ALCOHOL	70%
0007732-18-5	WATER	30%

SECTION 4) FIRST-AID MEASURES

Inhalation

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. Get medical attention.

Eye Contact

Rinse with plenty of water for at least 15 minutes.

Seek medical attention.

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. Flush with plenty of water for at least 15 minutes. Get medical attention.

Ingestion

Rinse mouth. Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

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

Flammable in the presence of a source of ignition when the temperature is above the flash point. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool containers with water.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Emits toxic fumes (carbon oxides) under fire conditions. (See also Stability and Reactivity section).

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. 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. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. This product is not intended for human or animal consumption.

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. Store in original containers. Keep containers securely

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.

Isopropyl Alcohol

Exposure Limit: OSHA (PEL) 400 ppm, 980 mg/m3

Chemical Name	CANsmg	CANsppm	CANtmg	CANtppm	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)
ISOPROPYL ALCOHOL	1228	500	983	400			980	400

Chemical	OSHA	OSHA Tables	OSHA Skin designation	ACGIH STEL	ACGIH STEL	ACGIH TWA	ACGIH TWA	ACGIH
Name	Carcinogen	(Z1, Z2, Z3)		(mg/m3)	(ppm)	(mg/m3)	(ppm)	TLV Basis
ISOPROPYL ALCOHOL		1			400		200	Eye & URT irr; CNS impair

Chemical	ACGIH	ACGIH
Name	Carcinogen	Notations
ISOPROPYL ALCOHOL	A4	A4; BEI

(C) - Ceiling limit, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, CNS - Central nervous system, impair - Impairment, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	7.02 lb/gal
Specific Gravity	0.84
Appearance	clear, colorless liquid
Odor Description	alcohol like
Odor Threshold	N/A
pH	neutral
Melting/Freezing Point	-29°C
Low Boiling Point	82 °C
High Boiling Point	N/A
Flash Point	18.3°C (tasse fermée)
Vapor Pressure	No Data Available

Vapor Density Evaporation Rate Upper Explosion Level Lower Explosion Level Water Solubility Coefficient Water/Oil Viscosity No Data Available No Data Available N/A N/A soluble in water No Data Available No Data Available

SECTION 10) STABILITY AND REACTIVITY

Reactivity

No data available.

Stability

Stable under normal storage and handling conditions.

Conditions to Avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Hazardous Reactions/Polymerization

Hazardous polymerization will not occur.

Incompatible Materials

Aluminum, acids, oxidizing agents, halogenated compounds, acid anhydrides.

Hazardous Decomposition Products

No data available.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure

Inhalation, ingestion, skin absorption

Acute Toxicity

0000067-63-0 ISOPROPYL ALCOHOL

If ingested causes drunkenness and vomiting. Inhalation can irritate the nose and throat.

LC50 (Rat, Inhalation) = 16,000 ppm/8H Reference : Registry of Toxic Effects of Chemical Substances If ingested causes drunkenness and vomiting. Inhalation can irritate the nose and throat.

LC50 (Rat, Inhalation) = 16,000 ppm/8H Reference : Registry of Toxic Effects of Chemical Substances If ingested causes drunkenness and vomiting. Inhalation can irritate the nose and throat.

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 irritation

0000067-63-0 ISOPROPYL ALCOHOL

Liquid irritates eyes and may cause injury.

Skin Corrosion/Irritation

Causes mild skin irritation

0000067-63-0 ISOPROPYL ALCOHOL

Contact can irritate and burn the skin. Prolonged or repeated contact can cause a skin rash, itching, dryness and redness.

Specific Target Organ Toxicity - Repeated Exposure

0000067-63-0 ISOPROPYL ALCOHOL

Repeated high exposure can cause headache, dizziness, confusion, loss of coordination, unconsciousness and even death.

Specific Target Organ Toxicity - Single Exposure

May cause drowsiness or dizziness

0000067-63-0 ISOPROPYL ALCOHOL

Vapors cause mild irritation of upper respiratory tract; high concentrations may be anesthetic.

Potential Health Effects - Miscellaneous

0000067-63-0 ISOPROPYL ALCOHOL

The following medical conditions may be aggravated by exposure: dermatitis, respiratory disease. Developmental toxicity was seen in rat's offspring at doses that were maternally toxic. Contact will cause moderate to severe redness and swelling, itching, tingling sensation, painful burning. May cause injury to the cornea of the eyes. Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver. Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.

Likely Routes of Exposure

0000067-63-0 ISOPROPYL ALCOHOL

The substance can be absorbed into the body by inhalation of its vapour.

0000067-63-0 ISOPROPYL ALCOHOL

LC50 (rat): 17000 ppm (4-hour exposure); cited as 12000 ppm (8-hour exposure) (18)

LD50 (oral, male rat): 4710 mg/kg (cited as 6.0 mL/kg) (19)

LD50 (oral, mouse): 3600 mg/kg (20, unconfirmed)

LD50 (dermal, rabbit): 12870 mg/kg (cited as 16.4 mL/kg) (14)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

No data available.

Mobility in Soil

No data available.

Bio-accumulative Potential

0000067-63-0 ISOPROPYL ALCOHOL

Substance is not expected to bioaccumulate.

Persistence and Degradability

0000067-63-0 ISOPROPYL ALCOHOL

Readily biodegradable

Other Adverse Effects

No data available.

Results of the PBT and vPvB assessment

0000067-63-0 ISOPROPYL ALCOHOL

Substance is readily biodegradable and therefore not considered to be persistent. It is not expected to bioaccumulate as it has a Log Kow < 4.5 and aquatic acute toxicity greatly exceeds the screening criteria of EC50 < 0.1 mg/l.

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	U.S. DOT Information
UN number:	UN1219	UN1219
Proper shipping name:	Isopropyl alcohol	Isopropyl alcohol
Hazard class:	3	3
Packaging group:	П	II
Hazardous substance (RQ):		No Data Available
Marine Pollutant:	No Data Available	No Data Available
Note / Special Provision:	Note / Special Provision	No Data Available
Toxic-Inhalation Hazard:		No Data Available
Transport in bulk (according to Annex II of MARPOL 73/78):	No Data Available	

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000067-63-0	ISOPROPYL ALCOHOL	70%	DSL,TSCA,EU_EC_Inventory
0007732-18-5	WATER	30%	DSL,TSCA,EU_EC_Inventory

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 CANsppm - 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.

Version 1.0:

Revision Date: Dec 19, 2019

First Edition.

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.