Isopropanol, 70% v/v

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)
Issue date: 2019-04-17 Revision date: 2021-09-21 Supersedes: 2019-04-17 Version: 1.1

SECTION 1: Identification

1.1. Product identifier

Product form	:	Mixtures
Product name	:	Isopropanol, 70% v/v
Substance type	:	Mono-constituent
Type of product	:	Pure substance
CAS-No.	:	67-63-0
Product code	:	LC15760
Formula	:	C3H8O
Product group	:	Trade product

1.2. Recommended use and restrictions on use

Recommended use	:	Laboratory chemicals
Restrictions on use	:	Not for food, drug or household use

1.3. Supplier

Supplier
LabChem, Inc.
1010 Jackson's Pointe Ct.
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

Supplier
LabChem, Inc.
4410 Paletta Court
Burlington, Ontario L7L 5R2- Canada

1.4. Emergency telephone number

Emergency number	:	CHEMTREC: 1-800-424-9300 or +1-703-741-5970

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Flammable liquids, Category 2	H225	Highly flammable liquid and vapour.
Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA) :

Signal word (GHS CA) : Danger

Hazard statements (GHS CA) : H225 - Highly flammable liquid and vapour.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.

Precautionary statements (GHS CA) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, lighting, ventilating equipment.
P242 - Use only non-sparking tools.
P243 - Take action to prevent static discharges.
P261 - Avoid breathing mist, spray, vapours.
P264 - Wash exposed skin thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, protective gloves.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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.
P312 - Call a POISON CENTER, a doctor if you feel unwell.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry extinguishing powder to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up.
P501 - Dispose of contents/container to comply with local, regional, national and international regulations.

2.3. Other hazards

Other hazards not contributing to the classification : None.

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Isopropyl Alcohol (2-Propanol)	1-methylethanol / 1-methylethyl alcohol / 2-hydroxypropane / dimethyl carbinol / ethyl carbinol / hydroxypropane / IPA / isoethylcarbinol / propan-2-ol / sec-propanol	CAS-No.: 67-63-0	70	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H335
Water	-	CAS-No.: 7732-18-5	30	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Give activated charcoal. Call Poison Information Centre (www.big.be/antigif.html). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.

Symptoms/effects after skin contact : Dry skin.

Symptoms/effects after eye contact : Irritation of the eye tissue.

Symptoms/effects after ingestion : AFTER INGESTION OF HIGH QUANTITIES: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Body temperature fall. Slowing respiration.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

Potential adverse human health effects and symptoms : Non-toxic if swallowed (LD50 oral, rat > 5000 mg/kg). Non-toxic in contact with skin (LD50 skin> 5000 mg/kg). Not irritant to skin. May cause drowsiness or dizziness. Practically non-toxic by inhalation (LC50 inh, rat > 20 mg/l/4h). Causes serious eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Antidote : None known.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant). Water spray if puddle cannot expand.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

5.3. Specific hazards arising from the hazardous product

Fire hazard : DIRECT FIRE HAZARD: Highly flammable liquid and vapour. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD: May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

Explosion hazard	:	DIRECT EXPLOSION HAZARD: Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD: may be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".
Reactivity in case of fire	:	On burning: release of irritant gases/vapours e.g.: (carbon monoxide - carbon dioxide).
Hazardous decomposition products in case of fire	:	Upon combustion: CO and CO2 are formed.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions	:	Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat.
Protection during firefighting	:	Heat/fire exposure: compressed air/oxygen apparatus.
Precautionary measures fire	:	Eliminate all ignition sources if safe to do so. Evacuate area. Exposure to fire/heat: keep upwind. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: consider evacuation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Clean up any spills as soon as possible, using an absorbent material to collect it. Use special care to avoid static electric charges.
Personal Precautions, Protective Equipment and Emergency Procedures	:	Chemical goggles or safety glasses. Protective gloves. Protective clothing. • Respiratory protection.
Prevention Measures for Secondary Accidents	:	Ventilate area.

6.2. Methods and materials for containment and cleaning up

For containment	:	Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.
Methods for cleaning up	:	Take up liquid spill into absorbent material, e.g.: dry sand/earth/vermiculite or powdered limestone. Scoop absorbed substance into closing containers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly. Work under local exhaust/ventilation. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over.
Local and general ventilation	:	Ensure adequate ventilation, especially in confined areas.
Incompatible substances or mixtures	:	Reacts violently with (strong) oxidizers.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible products	:	Oxidizing agent. silver nitrate. Sodium hypochlorite.

Incompatible materials	:	Direct sunlight. Heat sources. Sources of ignition.
Heat and ignition sources	:	KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
Storage temperature	:	15 – 25 °C
Storage area	:	Store in a cool area. Store in a dry area. Ventilation at floor level. Fireproof storeroom. Provide for an automatic sprinkler system. Provide for a tub to collect spills. Provide the tank with earthing. May be stored under nitrogen. Meet the legal requirements.
Prohibitions on mixed storage	:	KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases. amines. halogens.
Special rules on packaging	:	SPECIAL REQUIREMENTS: closing. with pressure relief valve. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	:	SUITABLE MATERIAL: stainless steel. monel steel. carbon steel. copper. nickel. bronze. glass. Teflon. polyethylene. polypropylene. zinc. MATERIAL TO AVOID: steel with rubber inner lining. aluminium.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Isopropyl Alcohol (2-Propanol) (67-63-0)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA (mg/m³)	492 mg/m³
OEL TWA (ppm)	200 ppm
OEL STEL (mg/m³)	984 mg/m³
OEL STEL (ppm)	400 ppm
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm
OEL STEL (ppm)	400 ppm
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm
OEL STEL (ppm)	400 ppm
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm
OEL STEL (ppm)	400 ppm
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm
OEL STEL (ppm)	400 ppm
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm
OEL STEL (ppm)	400 ppm
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm
OEL STEL (ppm)	400 ppm
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm

Isopropyl Alcohol (2-Propanol) (67-63-0)	
OEL STEL (ppm)	400 ppm
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm
OEL STEL (ppm)	400 ppm
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm
OEL STEL (ppm)	400 ppm
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA (ppm)	200 ppm
OEL STEL (ppm)	400 ppm
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA [ppm]	200 ppm
OEL STEL (ppm)	400 ppm
USA - ACGIH - Occupational Exposure Limits	
Local name	2-Propanol
ACGIH OEL TWA [ppm]	200 ppm
ACGIH STEL (ppm)	400 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2021
USA - ACGIH - Biological Exposure Indices	
Local name	2-PROPANOL
Biological Exposure Indices (BEI)	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B, Ns
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Isopropyl alcohol
OSHA PEL TWA [1]	980 mg/m³
OSHA PEL TWA [2]	400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Safety glasses. Gloves. Wear fire/flame resistant/retardant clothing. Chemical resistant apron.

Materials for protective clothing:
GIVE EXCELLENT RESISTANCE: butyl rubber. nitrile rubber. viton. polyethylene/ethylenevinylalcohol. GIVE GOOD RESISTANCE: neoprene. chloroprene rubber. GIVE LESS RESISTANCE: PVC. neoprene/natural rubber. GIVE POOR RESISTANCE: natural rubber. polyethylene. PVA

Hand protection:
Gloves

Eye protection:
Safety glasses

Skin and body protection:
Fireproof clothing

Respiratory protection:
Full face mask with filter type A at conc. in air > exposure limit

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Colour	:	Colourless
Odour	:	Alcohol odour Stuffy odour Mild odour
Odour threshold	:	3 – 610 ppm 8 – 1499 mg/m³
pH	:	No data available in the literature
Relative evaporation rate (butylacetate=1)	:	2.3
Relative evaporation rate (ether=1)	:	21
Molecular mass	:	60.1 g/mol
Melting point	:	-89 °C
Freezing point	:	No data available
Boiling point	:	82 °C (1013 hPa)
Flash point	:	12 °C
Critical temperature	:	235 °C
Auto-ignition temperature	:	399 °C
Decomposition temperature	:	No data available in the literature
Flammability (solid, gas)	:	No data available
Vapour pressure	:	44 hPa (20 °C)
Vapour pressure at 50 °C	:	229 hPa
Critical pressure	:	47600 hPa
Relative vapour density at 20 °C	:	2.1
Relative density	:	0.88
Relative density of saturated gas/air mixture	:	1.05

Density	:	0.88 g/ml
Solubility	:	Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in oils/fats. Soluble in chloroform. Water: miscible Ethanol: complete Ether: complete Acetone: soluble
Log Pow	:	0.05 (Weight of evidence approach, 25 °C)
Viscosity, kinematic	:	2.532 mm²/s (25 °C)
Viscosity, dynamic	:	2.1 mPa·s (25 °C)
Explosive limits	:	2 – 13 vol % 50 – 335 g/m³ Lower explosive limit (LEL): 2 vol % Upper explosive limit (UEL): 13 vol %
Particle size	:	Not applicable (liquid)

9.2. Other information

Minimum ignition energy	:	0.65 mJ
Specific conductivity	:	350000000 pS/m (25 °C)
Saturation concentration	:	106 g/m³
VOC content	:	877 g/l
Other properties	:	Gas/vapour heavier than air at 20°C. Clear. Volatile.

SECTION 10: Stability and reactivity

Reactivity	:	Violent to explosive reaction with (strong) oxidizers. Prolonged storage/in large quantities: may form peroxides.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Reacts vigorously with strong oxidizers and acids.
Conditions to avoid	:	Direct sunlight. Heat. High temperature. Incompatible materials. Open flame. Sparks.
Incompatible materials	:	May react violently with alkalis. May react violently with acids.
Hazardous decomposition products	:	Carbon dioxide. Carbon monoxide.
Hardening time:	:	No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified.
Acute toxicity (dermal)	:	Not classified.
Acute toxicity (inhalation)	:	Not classified

Isopropanol, 70% v/v (67-63-0)	
LD50 oral rat	5840 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Experimental value)
LD50 dermal rabbit	16400 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value)
LC50 Inhalation - Rat [ppm]	> 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male/female, Experimental value)
ATE CA (oral)	5840 mg/kg bodyweight
ATE CA (Dermal)	14432000 mg/kg bodyweight

Isopropyl Alcohol (2-Propanol) (67-63-0)	
LD50 oral rat	5840 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s))

Isopropyl Alcohol (2-Propanol) (67-63-0)	
LD50 dermal rabbit	16400 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat [ppm]	> 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE CA (oral)	5840 mg/kg bodyweight
ATE CA (Dermal)	16400 mg/kg bodyweight

Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg
ATE CA (oral)	90000 mg/kg bodyweight

Skin corrosion/irritation : Not classified
pH: No data available in the literature

Serious eye damage/irritation : Causes serious eye irritation.
pH: No data available in the literature

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

Isopropyl Alcohol (2-Propanol) (67-63-0)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Isopropanol, 70% v/v (67-63-0)	
Viscosity, kinematic	2.532 mm²/s (25 °C)

Likely routes of exposure : Inhalation. Skin and eyes contact.

Potential adverse human health effects and symptoms : Non-toxic if swallowed (LD50 oral, rat > 5000 mg/kg). Non-toxic in contact with skin (LD50 skin> 5000 mg/kg). Not irritant to skin. May cause drowsiness or dizziness. Practically non-toxic by inhalation (LC50 inh, rat > 20 mg/l/4h). Causes serious eye irritation.

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.

Symptoms/effects after skin contact : Dry skin.

Symptoms/effects after eye contact : Irritation of the eye tissue.

Symptoms/effects after ingestion : AFTER INGESTION OF HIGH QUANTITIES: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Body temperature fall. Slowing respiration.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.

Ecology - air : Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Ecology - water : Not harmful to crustacea. Not harmful to fishes. Groundwater pollutant. No inhibition of activated sludge. Not harmful to algae. Not harmful to bacteria.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Isopropanol, 70% v/v (67-63-0)	
LC50 fish 1	9640 – 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
Log Pow	0.05 (Weight of evidence approach, 25 °C)
Log Koc	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Isopropyl Alcohol (2-Propanol) (67-63-0)	
LC50 fish 1	9640 – 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
Log Pow	0.05 (Weight of evidence approach, 25 °C)
Log Koc	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

12.2. Persistence and degradability

Isopropanol, 70% v/v (67-63-0)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.19 g O □/g substance
Chemical oxygen demand (COD)	2.23 g O □/g substance
ThOD	2.4 g O □/g substance

Isopropyl Alcohol (2-Propanol) (67-63-0)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.19 g O □/g substance
Chemical oxygen demand (COD)	2.23 g O □/g substance
ThOD	2.4 g O □/g substance

Water (7732-18-5)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Isopropanol, 70% v/v (67-63-0)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Log Pow	0.05 (Weight of evidence approach, 25 °C)
Log Koc	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Isopropyl Alcohol (2-Propanol) (67-63-0)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Log Pow	0.05 (Weight of evidence approach, 25 °C)

Isopropyl Alcohol (2-Propanol) (67-63-0)	
Log Koc	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Water (7732-18-5)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

Isopropanol, 70% v/v (67-63-0)	
Surface tension	0.021 N/m (25 °C)
Ecology - soil	No (test)data on mobility of the substance available.
Log Koc	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Log Pow	0.05 (Weight of evidence approach, 25 °C)

Isopropyl Alcohol (2-Propanol) (67-63-0)	
Surface tension	No data available (test not performed)
Ecology - soil	Highly mobile in soil.
Log Koc	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Log Pow	0.05 (Weight of evidence approach, 25 °C)

12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste) : LWCA (the Netherlands): KGA category 03.

Waste disposal recommendations : Do not discharge into drains or the environment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

SECTION 14: Transport information

14.1. UN number

UN-No. (TDG) : UN1219

DOT NA No : UN1219

UN-No. (IMDG) : 1219

UN-No. (IATA) : 1219

14.2. UN proper shipping name

Proper Shipping Name (TDG) : ISOPROPYL ALCOHOL

Proper Shipping Name (DOT) : Isopropanol
Proper Shipping Name (IMDG) : Isopropanol (isopropyl alcohol)
Proper Shipping Name (IATA) : Isopropanol

14.3. Transport hazard class(es)

TDG

Transport hazard class(es) (TDG) : 3
Hazard labels (TDG) : 3

DOT

Transport hazard class(es) (DOT) : 3
Hazard labels (DOT) : 3

IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3
:

IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3
:

14.4. Packing group

Packing group : II
Packing group (DOT) : II
Packing group (IMDG) : II
Packing group (IATA) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

TDG

UN-No. (TDG) : UN1219
Explosive Limit and Limited Quantity Index : 1 L
Excepted quantities (TDG) : E2
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 5 L

DOT

UN-No.(DOT) : UN1219
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx) : 4b;150

DOT Packaging Non Bulk (49 CFR 173.xxx)	:	202
DOT Packaging Bulk (49 CFR 173.xxx)	:	242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	60 L
DOT Vessel Stowage Location	:	B - (i) The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) ‘‘On deck only’’ on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

IMDG

Transport regulations (IMDG)	:	Subject to the provisions
EmS-No. (Fire)	:	F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	:	S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS

IATA

Transport regulations (IATA)	:	Subject to the provisions

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Isopropyl Alcohol (2-Propanol) (67-63-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: Other information

SDS Major/Minor	:	None
Issue date	:	04-17-2019
Revision date	:	09-21-2021
Supersedes	:	04-17-2019

Full text of H-statements:

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

SDS Canada LabChem

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