

# PROPAN-2-OL (ISOPROPANOL) 99% Safety Data Sheet According to SANS 10234:2019 and SANS 11014:2010

	ccording to SANS 10234:2019 and SANS 11014:2010         sue date:01/07/2020         Revision date: 01/07/2025         :         Version: "
SECTION 1: Identification	
1.1. Product identifier	
Trade name	: PROPAN-2-OL (ISOPROPANOL) 99%
EC-No.	200-661-7
EC Index-No.	: 603-117-00-0
CAS-No.	: 67-63-0
JN-No. (ADR)	: 1219
Product code	: 116210xxx
Formula	: C3H8O
Recommended uses and restrictions	e substance or mixture and uses advised against : For laboratory use only
1.3. Supplier's details	
Labchem (Pty)Ltd 6 Wakefield Road Founders Hill 1609 Johannesburg - South Africa T +27 11 452 1116 - F +27 86 588 0293 techlab@labchem.co.za - www.labchem.co	<u>20.Za</u>
1.4. Emergency telephone numbe	r
Emergency number	: +27 11 452 1116
SECTION 2: Hazards identificat	ion
2.1. Classification of the substand	e or mixture
Classification according to the United	Nations GHS
Flammable liquids, Category 2	H225
Acute toxicity (oral) Not classified	
Acute toxicity (dermal) Not classified	
Serious eye damage/eye irritation,	H319
Category 2A Specific target organ toxicity — Single exposure, Category 3, Narcosis Hazardous to the aquatic environment - Acute Hazard Not classified Full text of H statements : see section 16	H336
2.2. Label elements	
_abelling according to the United Natio	ons GHS
Hazard pictograms (GHS-ZA)	
	GHS02 GHS07
Signal word (GHS-ZA)	: Danger
Hazard statements (GHS-ZA)	<ul> <li>H225 - Highly flammable liquid and vapour.</li> <li>H319 - Causes serious eye irritation.</li> <li>H336 - May cause drowsiness or dizziness.</li> </ul>
Precautionary statements (GHS-ZA)	<ul> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. N smoking.</li> </ul>
	<ul> <li>P233 - Keep container tightly closed.</li> <li>P240 - Ground and bond container and receiving equipment.</li> <li>P241 - Use explosion-proof equipment.</li> <li>P242 - Use non-sparking tools.</li> <li>P243 - Take action to prevent static discharges.</li> <li>P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P271 - Use only outdoors or in a well-ventilated area.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.</li> <li>Rinse skin with water/shower.</li> <li>P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove</li> </ul>
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2.2 Other becords	P31 P33 P37 P40 P40 P40 P50	tact lenses, if present and easy to 2 - Call a POISON CENTER or d 7+P313 - If eye irritation persists: 0+P378 - In case of fire: Use mer 3+P233 - Store in a well-ventilate 3+P235 - Store in a well-ventilate 5 - Store locked up. 1 - Dispose of contents/container prodance with local, regional, national	loctor if you feel unwe : Get medical advice/a dia other than water to ed place. Keep contain ed place. Keep cool. r to hazardous or spec	ill. attention. o extinguish. ner tightly closed. cial waste collection point, in
2.3. Other hazards Adverse physicochemical, human health and environmental effects		nly flammable liquid and vapour,N ation.	/lay cause drowsiness	s or dizziness,Causes serious eye
SECTION 3: Composition/informat	ion on i	ngredients		
3.1. Substances				
Substance identification codes: See section 1.	1			
Name		Product identifier	%	Classification according to the United Nations GHS
2-propanol (Main constituent)		(CAS-No.) 67-63-0	≥ 99	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Eye Irrit. 2A, H319 STOT SE 3, H336 Aquatic Acute Not classified
Full text of H-statements: see section 16				
3.2. Mixtures				
Not applicable				
SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures general	arre with Vor war phy drin	st: artificial respiration or oxygen. laboured breathing: half-seated. niting: prevent asphyxia/aspiration ming up). Keep watching the victi sical strain. Depending on the vic k. Call a poison center or a docto	. Cardiac arrest: perfo Victim in shock: on hi n pneumonia. Prevent im. Give psychologica stim's condition: doctor r if you feel unwell.	t cooling by covering the victim (no I aid. Keep the victim calm, avoid r/hospital. Never give alcohol to
First-aid measures after inhalation	air.	Respiratory problems: consult a c	doctor/medical service	
First-aid measures after skin contact	med	se with water. Soap may be used lical advice. Take victim to a doct mmediately all contaminated clotl	tor if irritation persists.	cal) neutralizing agents without . Rinse skin with water/shower. Take
First-aid measures after eye contact		se immediately with plenty of wate tinue rinsing. Do not apply (chem	er Remove contact le	
	victi min	m to an ophthalmologist if irritation	nical) neutralizing age on persists. Rinse cau present and easy to do	nts without medical advice. Take
First-aid measures after ingestion	victi min pers : Rin Call you	m to an ophthalmologist if irritatic utes. Remove contact lenses, if p sists: Get medical advice/attention se mouth with water. Do not apply Poison Information Centre (www	nical) neutralizing age on persists. Rinse cau present and easy to do n. y (chemical) neutralizi /.big.be/antigif.html). ( antities: immediately f	nts without medical advice. Take tiously with water for several b. Continue rinsing. If eye irritation ng agents without medical advice. Consult a doctor/medical service if to hospital. Take the container/vomit
-	victi min pers : Rin Call you to th	m to an ophthalmologist if irritatic utes. Remove contact lenses, if p sists: Get medical advice/attention se mouth with water. Do not apply Poison Information Centre (www feel unwell. Ingestion of large qu he doctor/hospital. Call a poison of	nical) neutralizing age on persists. Rinse cau present and easy to do n. y (chemical) neutralizi /.big.be/antigif.html). ( antities: immediately f	nts without medical advice. Take tiously with water for several b. Continue rinsing. If eye irritation ng agents without medical advice. Consult a doctor/medical service if to hospital. Take the container/vomit
4.2. Most important symptoms and eff Symptoms/effects	victi min pers : Rin : Call you to th fects, both : May	m to an ophthalmologist if irritation utes. Remove contact lenses, if p sists: Get medical advice/attention se mouth with water. Do not apply Poison Information Centre (www feel unwell. Ingestion of large qu ne doctor/hospital. Call a poison of acute and delayed v cause drowsiness or dizziness.	nical) neutralizing age on persists. Rinse cau present and easy to do n. y (chemical) neutralizi v.big.be/antigif.html). ( lantities: immediately to center or a doctor if yo	nts without medical advice. Take tiously with water for several b. Continue rinsing. If eye irritation ng agents without medical advice. Consult a doctor/medical service if to hospital. Take the container/vomit bu feel unwell.
4.2. Most important symptoms and eff Symptoms/effects Symptoms/effects after inhalation	victi min pers Call you to th fects, both : May : EXF Cer	m to an ophthalmologist if irritation utes. Remove contact lenses, if p sists: Get medical advice/attention se mouth with water. Do not apply Poison Information Centre (www feel unwell. Ingestion of large qu he doctor/hospital. Call a poison of <b>n acute and delayed</b> cause drowsiness or dizziness. POSURE TO HIGH CONCENTRA tral nervous system depression.	nical) neutralizing age on persists. Rinse cau present and easy to do n. y (chemical) neutralizi v.big.be/antigif.html). ( antities: immediately f center or a doctor if yo ATIONS: Headache. E	nts without medical advice. Take tiously with water for several b. Continue rinsing. If eye irritation ng agents without medical advice. Consult a doctor/medical service if to hospital. Take the container/vomit bu feel unwell.
<b>4.2. Most important symptoms and eff</b> Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact	victi min pers Call you to th fects, both : May : EXF Cer : Not	m to an ophthalmologist if irritation utes. Remove contact lenses, if p sists: Get medical advice/attention se mouth with water. Do not apply Poison Information Centre (www feel unwell. Ingestion of large qu he doctor/hospital. Call a poison of <b>n acute and delayed</b> cause drowsiness or dizziness. POSURE TO HIGH CONCENTRA tral nervous system depression. irritating.	nical) neutralizing age on persists. Rinse cau present and easy to do n. y (chemical) neutralizi y big.be/antigif.html). ( antities: immediately f center or a doctor if yo ATIONS: Headache. E Narcosis. Drowsiness	nts without medical advice. Take tiously with water for several b. Continue rinsing. If eye irritation ng agents without medical advice. Consult a doctor/medical service if to hospital. Take the container/vomit bu feel unwell.
<b>4.2. Most important symptoms and eff</b> Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact	victi min pers Call you to th fects, both ECTS, both EXF Cer : Not : Irrita : AFT LAT dep	m to an ophthalmologist if irritation utes. Remove contact lenses, if p sists: Get medical advice/attention se mouth with water. Do not apply Poison Information Centre (www feel unwell. Ingestion of large qu he doctor/hospital. Call a poison of <b>n acute and delayed</b> cause drowsiness or dizziness. POSURE TO HIGH CONCENTRA thrai nervous system depression. irritating. ation of the eye tissue. Redness of FER INGESTION OF HIGH QUAN FER: Nausea. Headache. Vomitin	nical) neutralizing age on persists. Rinse cau oresent and easy to do n. y (chemical) neutralizi y.big.be/antigif.html). ( antities: immediately fi center or a doctor if you ATIONS: Headache. E Narcosis. Drowsiness of the eye tissue. Eye NTITIES: FOLLOWING g. Disturbances of col ed motor response. Lo	nts without medical advice. Take tiously with water for several b. Continue rinsing. If eye irritation ng agents without medical advice. Consult a doctor/medical service if to hospital. Take the container/vomit u feel unwell. Dizziness. Coughing. Dry/sore throat c. irritation. G SYMPTOMS MAY APPEAR
First-aid measures after ingestion 4.2. Most important symptoms and eff Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion Chronic symptoms	victi min pers Call you to th Fects, botl Ects, botl Ects, botl Cer Not Irrita AFT LAT dep bloc	m to an ophthalmologist if irritation utes. Remove contact lenses, if p sists: Get medical advice/attention se mouth with water. Do not apply Poison Information Centre (www feel unwell. Ingestion of large qu he doctor/hospital. Call a poison of <b>n acute and delayed</b> acuse drowsiness or dizziness. POSURE TO HIGH CONCENTRA tral nervous system depression. irritating. ation of the eye tissue. Redness of FR INGESTION OF HIGH QUAN FR: Nausea. Headache. Vomitin ression. Abdominal pain. Disturbe od vessels. Body temperature fall.	nical) neutralizing age on persists. Rinse cau oresent and easy to do n. y (chemical) neutralizi y.big.be/antigif.html). ( antities: immediately fi center or a doctor if you ATIONS: Headache. I Narcosis. Drowsiness of the eye tissue. Eye NTITIES: FOLLOWING g. Disturbances of col ed motor response. Lo . Slowing respiration.	nts without medical advice. Take tiously with water for several b. Continue rinsing. If eye irritation ng agents without medical advice. Consult a doctor/medical service if to hospital. Take the container/vomit bu feel unwell. Dizziness. Coughing. Dry/sore throat c. irritation. G SYMPTOMS MAY APPEAR nsciousness. Central nervous syster

Treat symptomatically.

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SECTION 5: Firefighting measures	
5.1. 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. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.
5.2. Special hazards arising from the su	bstance or mixture
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. Highly flammable liquid and vapour.
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".
Hazardous decomposition products in case of fire	: Upon combustion: CO and CO2 are formed.
5.3. Advice for firefighters	
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 apparatus (EN 136 + EN 137). Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECT	ION 6: Accidental release mea	asures
6.1.	Personal precautions, protective e	quipment and emergency procedures
No add	itional information available	
6.1.1.	For non-emergency personnel	
Protect	ive equipment	: Gloves (EN 374). Protective goggles (EN 166). Protective clothing (EN 14605 or EN 13034). Large spills/in enclosed spaces: compressed air apparatus (EN 136 + EN 137).
Emerge	ency procedures	: Ventilate spillage area. Keep upwind. Mark the danger area. Consider evacuation. Seal off low- lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
6.1.2.	For emergency responders	
Protect	ive equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2.	Environmental precautions	
Avoid r	elease to the environment. Prevent spre	ading in sewers.
6.3.	Methods and material for containn	nent and cleaning up
For cor	ntainment	: Contain released product, 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 gasair mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.
Method	ls for cleaning up	: Take up liquid spill into absorbent material. 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. Notify authorities if product enters sewers or public waters.
Other in	nformation	: Dispose of materials or solid residues at an authorized site.
SECT	ION 7: Handling and storage	
7.1.	Precautions for safe handling	
Precau	tions 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. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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Hygiene measures	: Observe normal hygiene standards. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, i	ncluding any incompatibilities
Technical measures	: Ground/bond container and receiving equipment.
Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
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.
Heat and ignition sources	: KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
Information 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	<ul> <li>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.</li> </ul>

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

South Africa - Occupational Exposure Limits (Recommended Limits)		
Local name	Propan-2-ol (Isopropyl alcohol)	
OEL TWA (mg/m³)	960 mg/m³ Isopropyl alcohol 980 mg/m³ Propan-2-ol	
OEL TWA (ppm)	400 ppm	
OEL STEL (mg/m <sup>3</sup> )	1225 mg/m <sup>3</sup>	
OEL STEL (ppm)	500 ppm	
Remark	Sk	
Regulatory reference	Government Notice. R: 1179	

8.2. Appropriate engineering controls		
Appropriate engineering controls	: Ensure good ventilation of the work station.	
Environmental exposure controls	: Avoid release to the environment.	
8.3. Individual protection measures, such	ch as personal protective equipment (PPE)	
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	: Protective gloves	
Skin and body protection	: Protective clothing (EN 14605 or EN 13034)	
Respiratory protection	: Full face mask with filter type A at conc. in air > exposure limit	
Personal protective equipment symbol(s):		



8.4. Exposure limit values for the other components

#### No additional information available

SECTION 9: Physical and chemical properties		
9.1. Information on basic	physical and chemical properties	
Physical state	: Liquid	
Appearance	: Liquid.	
Molecular mass	: 60.1 g/mol	
Colour	: Colourless.	
Odour	: Alcohol odour. Stuffy odour. Mild odour.	
Odour threshold	: No data available	
рН	: Not applicable	
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pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: 2.3
Relative evaporation rate (ether=1)	: 21
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
Flammability (solid, gas)	: Not applicable
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	: 0.8 (20 °C)
Relative density of saturated gas/air mixture	: 1.05
Density	: 785 kg/m <sup>3</sup>
5	: No data available
Relative gas density Solubility	: Miscible with 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
Partition coefficient n-octanol/water (Log Pow)	: 0.05 (Weight of evidence approach, 25 °C)
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: 2.532 mm²/s (25 °C)
Viscosity, dynamic	: 2.1 mPa·s (25 °C)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 2 – 13 vol %
Lower explosive limit (LEL)	: 2 vol %
Upper explosive limit (UEL)	: 13 vol %
9.2. Other information	
	: 0.65 mJ
Minimum ignition energy Specific conductivity	: 35000000 pS/m (25 °C)
-	
Saturation concentration	: 106 g/m <sup>3</sup>
VOC content	: 100 %
Other properties	: Gas/vapour heavier than air at 20°C. Clear. Volatile.
<b>SECTION 10: Stability and reactivity</b>	
10.1. Reactivity	
Violent to explosive reaction with (strong) oxidize	ers. Prolonged storage/in large quantities: may form peroxides. Highly flammable liquid and vapour.
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactions	
No dangerous reactions known under normal cor	nditions of use.
10.4. Conditions to avoid	
Avoid contact with hot surfaces. Heat. No flames	, no sparks. Eliminate all sources of ignition.
10.5. Incompatible materials	

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)

: Not classified.

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Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified
PROPAN-2-OL (ISOPROPANOL) 99% (6	7-63-0)
LD50 oral rat	5840 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 1 day(s))
LD50 dermal rabbit	16400 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (ppm)	> 10 000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
Skin corrosion/irritation	: Not classified
	pH: Not applicable
Serious eye damage/irritation	: Causes serious eye irritation.
	pH: Not applicable
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

PROPAN-2-OL (ISOPROPANOL) 99% (67-63-0)		
Viscosity, kinematic	2.532 mm²/s (25 °C)	
Potential adverse human health effects and symptoms	<ul> <li>Non-toxic if swallowed (LD50 oral, rat &gt; 5000 mg/kg). Not irritant to skin. Non-toxic in contact with skin (LD50 skin&gt; 5000 mg/kg). May cause drowsiness or dizziness. Causes serious eye irritation.</li> </ul>	

<b>SECTION 12: Ecological information</b>	
12.1. Toxicity	
Ecology - general	: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
Ecology - air	<ul> <li>Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Photooxidation in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).</li> </ul>
Ecology - water	: Not harmful to crustacea. Not harmful to fishes. Groundwater pollutant. 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
PROPAN-2-OL (ISOPROPANOL) 99% (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)
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)
Partition coefficient n-octanol/water (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
12.2. Persistence and degradability	
PROPAN-2-OL (ISOPROPANOL) 99% (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 <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.23 g O <sub>2</sub> /g substance
ThOD	2.4 g O <sub>2</sub> /g substance
12.3. Bioaccumulative potential	
PROPAN-2-OL (ISOPROPANOL) 99% (67-63	-0)
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)
Partition coefficient n-octanol/water (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

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12.4. Mobility in soil		
PROPAN-2-OL (ISOPROPANOL) 99% (67-63-0)		
Mobility in soil	No additional information available	
Surface tension	0.021 N/m (25 °C)	
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)	
Partition coefficient n-octanol/water (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Highly mobile in soil.	
12.5. Other adverse effects		
Ozone	: Not classified	
Other adverse effects	: No additional information available	

SECTION 13: Disposal considerations		
13.1. Disposal methods		
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.	
Product/Packaging 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. Incinerate under surveillance 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. Flammable vapours may accumulate in the container.	

#### **SECTION 14: Transport information**

In accordance with SANS / IMDG / IATA

SANS	IMDG	ΙΑΤΑ		
14.1. UN number				
1219	1219	1219		
14.2. Proper Shipping Name				
ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	Isopropanol		
14.3. Transport hazard class(es)				
3	3	3		
		Not applicable		
14.4. Packing group				
Ш	11	Ш		
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No		
	:			
No supplementary information available				

#### 14.6. Special precautions for user

#### - SANS

o Alto	
Transport regulations (UN)	: Subject to the provisions
Limited quantities (SANS)	: 1L
Limited quantities (SANS)	: 1L
Packagings, large packagings and IBCs Packing instructions (SANS)	: P001, IBC02
Portable tank and bulk containers instructions (SANS)	: T4
Portable tank and bulk container special provisions (SANS)	: TP1
- IMDG	
Transport regulations (IMDG)	: Subject to the provisions

#### Safety Data Sheet

According to SANS 10234:2019 and SANS 11014:2010

Limited quantities (IMDG)	: 1L		
Excepted quantities (IMDG)	: E2		
Packing instructions (IMDG)	: P001		
IBC packing instructions (IMDG)	: IBC02		
Tank instructions (IMDG)	: T4		
Tank special provisions (IMDG)	: TP1		
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS		
EmS-No. (Spillage)	: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS		
Stowage category (IMDG)	: B		
Flash point (IMDG)	: 12°C c.c.		
Properties and observations (IMDG)	: Colourless, mobile liquid. Flashpoint: 12°C c.c. Explosive limits: 2% to 12% Miscible with water.		
- IATA			
Transport regulations (IATA)	: Subject to the provisions		
PCA Excepted quantities (IATA)	: E2		
PCA Limited quantities (IATA)	: Y341		
PCA limited quantity max net quantity (IATA)	: 1L		
PCA packing instructions (IATA)	: 353		
PCA max net quantity (IATA)	: 5L		
CAO packing instructions (IATA)	: 364		
CAO max net quantity (IATA)	: 60L		
Special provisions (IATA)	: A180		
ERG code (IATA)	: 3L		
	ex II of MARPOL 73/78 and the IBC Code		
Not applicable			
SECTION 15: Regulatory informatio			
15.1. Safety, health, and environmental r	national regulations specific for the product		
Regulatory reference	<ul> <li>SANS 10234:2008; SANS 11014:2010; SANS 10228:2012; SANS 10229:2010; SANS 10232(1,2,4), SANS 10231:2018; Occupational Health and Safety Act 85 of 1993; National Road Traffic Act 93 of 1996.</li> </ul>		
SECTION 16: Other information	01/07/0000		
Issue date	: 01/07/2020		
Revision date	: 01/07/2025		
Full text of H-statements:			
H225	Highly flammable liquid and vapour.		
H319	Causes serious eye irritation.		
H336	May cause drowsiness or dizziness.		

The data provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge. The data relates to the specific product as named and is ntended as a guide to the safe handling of the product in all its facets. The data may no longer be valid if the product is used in any process or in combination with other products. This SDS is not a quality specification nor any form of guarantee.