



SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME	ISOPROPYL ALCOHOL, ACS (Alcohol 99%)
PRODUCT CODE	3216
SUPPLIER	MEDISCA Inc. Tel.: 1.800.932.1039 Fax.: 1.855.850.5855 661 Route 3, Unit C, Plattsburgh, NY, 12901 6641 N. Belt Line Road, Suite 130, Irving, TX, 75063 MEDISCA Pharmaceutique Inc. Tel.: 1.800.665.6334 Fax.: 514.338.1693 4509 Rue Dobrin, St. Laurent, QC, H4R 2L8 21300 Gordon Way, Unit 153/158, Richmond, BC V6W 1M2 MEDISCA Australia PTY LTD Tel.: 1.300.786.392 Fax.: 61.2.9700.9047 Unit 7, Heritage Business Park 5-9 Ricketty Street, Mascot, NSW 2020
EMERGENCY PHONE	CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 NSW Poisons Information Centre: 131 126 National Chemical Emergency Centre 44(0)1235239670
RECOMMENDED USES	Industrial/Lab Use Only
RESTRICTIONS ON USE	Not applicable

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION	Flammable Liquid (Category 1) Eye Irritation (Category 2A) Skin Irritation (Category 2) Acute Toxicity - Oral (Category 5) Acute Toxicity - Inhalation (Category 5) Specific Target Organ Toxicity - Single Exposure (Category 3) - CNS
PICTOGRAM	 
SIGNAL WORD	Danger
HAZARD STATEMENT(S)	Extremely flammable liquid and vapor. Vapour/air mixtures are explosive. Causes serious eye irritation. Causes skin irritation. May cause drowsiness or dizziness. May be harmful if swallowed or inhaled.
ADVERSE PHYSIOCHEMICAL, HUMAN HEALTH AND ENVIRONMENTAL EFFECTS	Repeated exposure may cause skin dryness or cracking.

PRECAUTIONARY STATEMENT(S)
Prevention

Keep away from heat, sparks, open flames and No smoking
 Keep container tightly closed
 Ground/Bond container and receiving equipment
 Use explosion-proof equipment
 Use non-sparking tools
 Take action to prevent static discharges
 Wear protective gloves, protective clothing, eye and face protection.
 Wash hands thoroughly after handling. Do not touch eyes.
 Avoid breathing dust, fume, gas, mist, vapors and spray.
 Use only outdoors or in a well-ventilated area.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.

Response

IF ON SKIN (HAIR): Take off immediately all contaminated clothing. Rinse affected areas with water/shower.
 IN CASE OF FIRE: Use powder, alcohol-resistant foam, water in large amounts, carbon dioxide. In case of fire: keep drums, etc., cool by spraying with water.
 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 help.
 IF EXPOSED OR CONCERNED: Get medical advice/attention.
 IF SWALLOWED: Get medical help.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor. Get medical help if you feel unwell.

Storage

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

Disposal

Dispose of contents and/or container in accordance with local regulations.

HMIS CLASSIFICATION
Health Hazard

2

Flammability

3

Reactivity

1

Personal Protection

G

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
CHEMICAL NAME

2-propanol

BOTANICAL NAME

Not applicable

SYNONYM

2-Propyl alcohol; 1-Methylethanol; Secondary Propyl Alcohol; Propan-2-ol; IPA

CHEMICAL FORMULA
 C_3H_8O
CHEMICAL FAMILY

Not available

CAS NUMBER

67-63-0

ALTERNATE CAS NUMBER

Not applicable

MOLECULAR WEIGHT

60.10

COMPOSITION

CHEMICAL NAME	CAS NUMBER	EC NUMBER	% BY WEIGHT
ISOPROPYL ALCOHOL	67-63-0	200-661-7	100% v/v

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as health hazards and hence require reporting in this section.

SECTION 4: FIRST-AID MEASURES
IN CASE OF EYE CONTACT

Flush with copious amounts of water for 15 minutes, separating eyelids with fingers. If irritation persists seek medical aid.

IN CASE OF SKIN CONTACT	Wash with soap & water for 15 minutes. If irritation persists seek medical aid.
IF SWALLOWED	Call a physician. Wash out mouth with water. Do not induce vomiting without medical advice.
IF INHALED	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
MEDICAL ATTENTION AND SPECIAL TREATMENT	Get emergency medical help.
SYMPTOMS CAUSED BY EXPOSURE	Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 5: FIREFIGHTING MEASURES

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL	Vapour/air mixtures are explosive.
FLAMMABLE PROPERTIES	Flammable
HAZARDOUS COMBUSTION PRODUCTS	Under fire conditions, hazardous fumes will be present.
SUITABLE & UNSUITABLE EXTINGUISHING MEDIA	Small fire: dry chemical, CO ₂ or water spray. Large fire: dry chemical, CO ₂ , alcohol resistant foam or water spray. Do not get water inside containers.
PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
METHODS & MATERIAL FOR CONTAINMENT	On land, sweep or shovel into suitable containers.
CLEANUP PROCEDURE	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.
REFERENCE TO OTHER SECTIONS	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling. Store away from incompatible materials, in a well-ventilated area. Eliminate all sources of ignition. Store in accordance with local regulations. Do not store in unlabeled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination.
CONDITIONS FOR SAFE STORAGE	Store away from incompatible materials, in a well-ventilated area. Eliminate all sources of ignition. Store in accordance with local regulations. Do not store in unlabeled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination.
STORAGE CONDITIONS	Store in original container, tightly sealed, protected from direct sunlight and moisture.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION
Chemical Name: ISOPROPYL ALCOHOL CAS #: 67-63-0

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	400	980	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	200	400	N/L	N/L	N/L	N/L	N/A	A4 (not classifiable as a human carcinogen)
NIOSH	USA	400	980	500	1225	2000 ppm*	400ppm(980mg/m ³)	N/A	*10%LEL (See: 67630)
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	400	980	500	1225	N/L	N/L	N/A	N/A
HSE	UK	400	983	500	1250	N/L	N/L	N/A	N/A
GESTIS	Austria	200	500	800	2000	N/L	N/L	N/A	N/A
GESTIS	Belgium	200	500	400 (1)	1000 (1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Canada - Ontario	200	N/L	400	N/L	N/L	N/L	N/A	N/A
GESTIS	Canada - Quebec	400	983	500	1230	N/L	N/L	N/A	N/A
GESTIS	Denmark	200	490	400	980	N/L	N/L	N/A	N/A
GESTIS	Finland	200	500	250 (1)	620 (1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	France	N/L	N/L	400	980	N/L	N/L	N/A	N/A
GESTIS	Germany (AGS)	200	500	400 (1)	1000 (1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Germany (DFG)	200	500	400	1000	N/L	N/L	N/A	STV 15 minutes average value
GESTIS	Hungary	N/L	N/L	500	2000	N/L	N/L	N/A	N/A
GESTIS	Ireland	200	N/L	N/L	400 (1)	N/L	N/L	N/A	(1) 15 minutes reference period
GESTIS	Japan (MHLW)	400	N/L	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Japan (JSOH)	400 (1)	980 (1)	N/L	N/L	N/L	N/L	N/A	(1) Occupational exposure limit ceiling: Reference value to the maximal exposure concentration of the substance during a working day
GESTIS	Latvia	N/L	350	N/L	600 (1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	New Zealand	400	983	500	1230	N/L	N/L	N/A	N/A
GESTIS	China	N/L	350	N/L	700 (1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Poland	N/L	900	N/L	1200	N/L	N/L	N/A	N/A
GESTIS	Romania	81	200	203 (1)	500 (1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Singapore	400	983	500	1230	N/L	N/L	N/A	N/A

GESTIS	South Korea	200	480	400	980	N/L	N/L	N/A	N/A
GESTIS	Spain	200	500	400	1000	N/L	N/L	N/A	N/A
GESTIS	Sweden	150	350	250 (1)	600 (1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Switzerland	200	500	400	1000	N/L	N/L	N/A	N/A

N/L = Not listed ; N/A = Not Available

PELs are 8-hour TWAs = Limit value - Eight hours

Ceiling or Short-Term TWA = STEL = Limit value - Short term

EXPOSURE GUIDELINES

Consult local authorities for provincial or state exposure limits. Particulates not otherwise regulated, respirable fraction: 5 mg/m³. A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C; on spraying or dispersing, however, much faster.

PERSONAL PROTECTIVE EQUIPMENT

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by WHMIS or OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. **Skin:** Wear appropriate gloves to prevent skin exposure. **Clothing:** Wear appropriate protective clothing to minimize contact with skin. **Respirators:** Follow WHMIS or OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. **Thermal Hazards:** For products representing a thermal hazard, appropriate Personal Protective Equipment should be used.

SPECIFIC ENGINEERING CONTROLS

Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower.

BIOLOGICAL MONITORING

Not available

CONTROL BANDING

Not available

NOTES

The substance is irritating to the eyes and the respiratory tract. The substance may cause effects on the central nervous system, resulting in depression. Exposure far above the OEL may result in unconsciousness.

Mild irritation of the upper respiratory tract may begin at approximately 400 ppm. High concentrations may cause drowsiness, lack of coordination and deep narcosis.

Eye damage from contact with liquid is reversible and proper treatment will result in healing within a few days. Damage is usually mild to moderate conjunctivitis, seen mainly as redness of the conjunctiva.

OEL:

MAK: 200 ppm, 500 mg/m³

Peak limitation category: II(2); Pregnancy risk group: C; (DFG 2004).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE

Liquid

DESCRIPTION

Transparent, colorless, mobile, volatile liquid, having a characteristic odor. Is flammable.

SOLUBILITY

Miscible with water, with alcohol, with ether, and with chloroform.

ODOR

Characteristic odor

FLAMMABILITY

Flammable

AUTO-IGNITION TEMPERATURE

456 °C, 852.8 °F

BOILING POINT

83 °C, 181.4 °F

DECOMPOSITION TEMPERATURE

Not available

EVAPORATION RATE

2.3 (butyl acetate=1)

EXPLOSIVE LIMIT

2 - 12%

FLASH POINT

11.7°C, 53.06°F (Closed Cup)

log P (OCTANOL-WATER)	0.05 (25°C)	LOWER FLAMMABLE/ EXPLOSIVE LIMIT(S)	Not available	MELTING/FREEZING POINT	-90 °C, -130 °F
PARTICLE CHARACTERISTICS	40 - 200ppm	OXIDIZING PROPERTY	Not available	pH	Not available
RELATIVE DENSITY (WATER = 1)	0.79	SPECIFIC GRAVITY	0.78–0.79 (20°C)	UPPER FLAMMABLE/ EXPLOSIVE LIMIT(S)	Not available
VAPOR DENSITY (AIR = 1)	2.1	VAPOR PRESSURE	4.4 kPa (20°C)	VISCOSITY	Not available

The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY	Not established
CHEMICAL STABILITY	Stable under recommended storage conditions
INCOMPATIBLE MATERIALS	Strong oxidants. Strong acids. Aluminium if > 50°C. Most plastics. Neoprene rubber.
HAZARDOUS DECOMPOSITION PRODUCTS	Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and other gases may occur
HAZARDOUS POLYMERIZATION	Will not occur
POSSIBILITY OF HAZARDOUS REACTION	Not established
CONDITIONS TO AVOID	Moisture, sunlight and extreme temperatures

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	Oral: Rat: LD50: (mg/kg): 4396 Dermal: Rabbit LD50: (mg/kg): 12 800 Inhalation: Rat: LC50: (mg/L/4hr): 72.6
SKIN CORROSION/IRRITATION	Causes skin irritation
SERIOUS EYE DAMAGE/EYE IRRITATION	Severe eye irritant
RESPIRATORY SENSITIZATION	Based on available data, the classification criteria are not met.
SKIN SENSITIZATION	Based on available data, the classification criteria are not met.
GERM CELL MUTAGENICITY	Based on available data, the classification criteria are not met.
CARCINOGENICITY	OSHA ISOPROPYL ALCOHOL (Alcohol 99%) is not listed. NTP ISOPROPYL ALCOHOL (Alcohol 99%) is not listed. IARC ISOPROPYL ALCOHOL (Alcohol 99%) is listed in group 3 (not classifiable as to its carcinogenicity to humans). California Proposition 65 This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

ADDITIONAL CARCINOGENICITY INFORMATION

Based on available data, the classification criteria are not met.

REPRODUCTIVE TOXICITY

Causes foetotoxicity in animals at doses which are maternally toxic. Does not impair fertility. Based on available data, the classification criteria are not met.

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

The substance may cause effects on the central nervous system.

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

Based on available data, the classification criteria are not met.

ASPIRATION HAZARDS

Based on available data, the classification criteria are not met.

SIGNS AND SYMPTOMS OF EXPOSURE
ROUTES OF EXPOSURE:

Oral, Dermal, Inhalation, Eye contact

EARLY ONSET SYMPTOMS RELATED TO EXPOSURE:

Not available

DELAYED HEALTH EFFECT FROM EXPOSURE:

Not available

Isopropyl alcohol is considered to be more toxic than ethyl alcohol and the symptoms of intoxication appear to be similar, except that isopropyl alcohol has no initial euphoric action and gastritis, haemorrhage, pain, nausea, and vomiting are more prominent. The lethal oral dose is reported to be about 120 to 240 mL in adults; however, toxic symptoms may be produced by as little as 20 mL. Ketoacidosis and ketonuria commonly occur due to the presence of the major metabolite, acetone, in the circulation.

Possible direct toxic effects on the brain, thiamine deficiency, Wernicke-Korsakoff syndrome; pancreatitis, cardiovascular disease, tremor, agitation, feelings of dread, nausea, vomiting, sweating, hallucinations, seizures, delirium tremens, fetal alcohol syndrome.

The substance is irritating to the eyes and the respiratory tract. The substance may cause effects on the central nervous system, resulting in depression. Exposure far above the OEL may result in unconsciousness.

POTENTIAL HEALTH EFFECTS
Inhalation

May be harmful if inhaled. Causes respiratory tract irritation. Cough. Dizziness. Drowsiness. Headache. Sore throat. Mild irritation of the upper respiratory tract may begin at approximately 400 ppm. High concentrations may cause drowsiness, lack of coordination and deep narcosis.

Ingestion

May be harmful if swallowed. Abdominal pain. Laboured breathing. Nausea. Unconsciousness. Vomiting. Death.

Skin

May be harmful if absorbed through skin. Causes skin irritation. Application of isopropyl alcohol to the skin may cause dryness and irritation; suitable precautions should be taken to prevent absorption through the skin, particularly in infants.

Eyes

Severe eye irritant. Vapours can irritate eyes beginning at approximately 400 ppm. Eye damage from contact with liquid is reversible and proper treatment will result in healing within a few days. Damage is usually mild to moderate conjunctivitis, seen mainly as redness of the conjunctiva.

SECTION 12: ECOLOGICAL INFORMATION
ECOTOXICITY

EC50: 48 Hr: Crustacea: (mg/L): 13 299

LC50: 96 Hr: Fish: (mg/L): 61 200

IC50: 72 Hr: Algae: (mg/L): > 1000

PERSISTENCE AND DEGRADABILITY

Readily biodegradable meeting the 10 day window criterion.

BIOACCUMULATIVE POTENTIAL

Not likely to bioaccumulate: LogPow: 0.05 (25°C)

MOBILITY IN SOIL

Will likely be mobile in the environment due to its water solubility and may contaminate groundwater.

Water Solubility: 1.00E+06 mg/L (25°C)

Henry's Law Constant: 8.10E-06 atm-m³/mole (25°C)

Oxidises rapidly by photo-chemical reactions in air.

OTHER ADVERSE EFFECTS

Not available

This product is not intended to be released into the environment

SECTION 13: DISPOSAL CONSIDERATIONS
DISPOSAL METHODS

Dispose of in accordance with federal / local laws and regulations. Avoid release into the environment.

SECTION 14: TRANSPORT INFORMATION
UN PROPER SHIPPING NAME

ISOPROPYL ALCOHOL

UN NUMBER

1219

CLASS

3

PACKING GROUP

II

AUSTRALIA
HAZCHEM

2YE

EU
TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not Listed

ENVIRONMENTAL HAZARDS

Not available

SPECIAL SHIPPING INFORMATION

Not applicable

SECTION 15: REGULATORY INFORMATION
UNITED STATES REGULATIONS

Chemical Name & CAS	CERCLA 40 CFR Part 302.4	SARA (Title III) 40 CFR Part 372.65	EPA 40 CFR Part 355		Right-to-know			California Prop 65
			Appendix A	Appendix B	Pennsylvania	New Jersey	Massachusetts	
ISOPROPYL ALCOHOL, 67-63-0	N/L	X	N/L	N/L	X	X	X	N/L

N/L = Not Listed; X = Listed

AUSTRALIAN REGULATIONS

Chemical Name & CAS	Poisons and Therapeutic Goods	Therapeutic Goods Act	Code of Practices - Illicit Drug Precursors	Poisons Standard	Work Health and Safety Regulations	Inventory of Industrial Chemicals
ISOPROPYL ALCOHOL, 67-63-0	N/L	N/L	N/L	N/L	N/L	N/L

N/L = Not Listed

EU REGULATIONS

Chemical Name & CAS	REACH ANNEX XVII	REACH ANNEX XIV	EC 1005/2009	EC 850/2004	EC 1107/2009	PIC - Prior Informed Consent Regulation	EC 2012/18
ISOPROPYL ALCOHOL, 67-63-0	N/L	N/L	N/L	N/L	N/L	N/L	N/L

N/L = Not Listed; X = Listed

Any EU regulation not listed above is not applicable to this product.

SUBJECT TO INTERNATIONAL AGREEMENT

Not applicable

SECTION 16: OTHER INFORMATION

REFERENCES

Available upon request

ABBREVIATIONS AND ACRONYMS

ACGIH - American Conference of Governmental Industrial Hygienists; **AIHA WEEL** – American Industrial Hygiene Association Workplace Environment Exposure Levels; **CAESAR** – Computer Assisted Evaluation of industrial chemical Substances According to Regulations; **CAS** – Chemical Abstract Service; **CERCLA** – Comprehensive Environmental Response, Compensation, and Liability Act; **EC50** – Effective Concentration, 50%; **EPA** – Environmental Protection Agency; **GHS** – Global Harmonized System; **HMIS** – Hazardous Materials Information System; **HSE** – Health and Safety Executive; **HSIS** – Hazardous Substances Information System; **IARC** – International Agency for Research on Cancer; **IDLH** - Immediately Dangerous to Life or Health; **IRFMN** – Ready Biodegradability Model; **ISS** – Istituto Superiore Sanità; **LC50** – Lethal Concentration, 50%; **LD50** – Lethal Dose, 50%; **MSHA** - Mine Safety and Health Administration; **NIOSH** – National Institute for Occupational Safety and Health; **NTP** – National Toxicology Program; **OSHA PEL** – Occupational Safety & Health Administration Permissible Exposure Limits; **QSAR** – Quantitative Structure-activity relationship; **REL** - Recommended Exposure Limit; **SARA** – Superfund Amendments and Reauthorization Act; **STEL** – Short Term Exposure Limit; **TLV** – Threshold Limit Value; **TWA** – Time Weighted Average; **WHMIS** – Workplace Hazardous Materials Information System

LAST REVISION

03/2023

SUPERSEDES

04/2020

For a list of changes to the SDS since the last version, please communicate with MEDISCA at www.medisca.com

DISCLAIMER

This document was created in accordance with OSHA, Safe Work Australia and WHMIS regulations. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. MEDISCA® shall not be held liable for any damage resulting from handling or from contact with the above product. Recipients of the product must take responsibility for observing existing laws and regulations.

SUPPLEMENTARY INFORMATION

For all country specific requirements not outlined on this Safety Data Sheet, please request Supplementary Page to this Safety Data Sheet.