
1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Isopropyl Alcohol
Synonyms	2-Propanol, sec-Propyl alcohol, Isopropyl alcohol, Isopropanol
Grade	ACS, HPLC, HPLC-prep, Pesticide, Anapremium, Dehydrous, LCMS
Company	Anaqua Chemicals Supply 1510 Eldridge Parkway, Suite 110-268 Houston, TX 77077, USA
Telephone	(281) 668-0032
Fax	(281) 668-0033

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Formula	C ₃ H ₈ O
CAS-No.	67-63-0
Index-No.	603-117-00-0
Ec-No.	200-661-7
Concentration	≥ 99.5 %

3. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids	Category 2
Eye irritation	Category 2
Specific target organ toxicity – single exposure	Category 3

According to European Directive 67/548/EEC as amended.

Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness.

4. FIRST AID MEASURES

Inhalation	If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician immediately.
Skin Contact	Immediately wash off with soap and plenty of water. Consult a physician.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.

Most important symptoms and effects, both acute and delayed

Central nervous system depression, prolonged or repeated exposure can cause: Nausea, Headache, Vomiting, narcosis, Drowsiness, Overexposure may cause mild, reversible liver effects.

Indication of immediate medical attention and special treatment needed

No available information

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during fire fighting	Carbon oxides
Special protective equipment for fire-fighters	Wear self contained breathing apparatus for fighting fire if necessary. Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.
Storage	Handle under nitrogen, protect from moisture. Store under nitrogen. Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Handle and store under inert gas. Hygroscopic.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational exposure controls

Engineering Measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
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Personal protective Equipment

Respiratory protection	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Eye / face protection	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Body protection	Impervious clothing, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid, clear
Color	Colorless
pH	No available information
Melting point	-89.5 °C (-129.1 °F)
Boiling point	82 °C (179.6 °F)
Flash point	12.0 °C (53.6 °F) - closed cup
Autoignition temperature	425 °C
Lower explosion limit	2 % (V)
Upper explosion limit	12.7 % (V)
Vapor pressure	43.2 hPa at 20.0 °C (68.0 °F) 58.7 hPa at 25 °C (77 °F)
Density	0.785 g/ cm ³ at 25 °C (77 °F)
Water solubility	Completely soluble
Partition coefficient: n-octanol/ water	log Pow: 0.05
Molecular weight	60.1
Surface tension	20.8 mN/m at 25 °C
Viscosity	No available information
Explosive properties	No available information
Oxidizing properties	No available information

10. STABILITY AND REACTIVITY

Storage stability	No available information
Conditions to avoid	Heat, flames and sparks. Extremes of temperature and direct sunlight.
Materials to avoid	Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids
Hazardous decomposition products	No available information

11. TOXICOLOGICAL INFORMATION

Acute toxicity	LD50 Oral 5,045 mg/kg (Rat) Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Somnolence (general depressed activity). LD50 Dermal 12,800 mg/kg (Rabbit) LC50 Inhalation 16,000 ppm (Rat) 8 h
Skin irritation	Mild skin irritation (Rabbit)
Eye irritation	Eye irritation (Rabbit) 24 h
Sensitization	Did not cause sensitization on laboratory animals.
Germ cell mutagenicity	No available information
Specific target organ toxicity – single exposure (GHS)	May cause drowsiness or dizziness.
Specific target organ toxicity – repeated exposure (GHS)	No available information
Carcinogenicity	This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Propanol)
Reproductive toxicity	No available information
Aspiration hazard	No available information
Potential health effects	Inhalation Harmful if inhaled. May cause respiratory tract irritation. Vapours may cause drowsiness and dizziness. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. May cause skin irritation. Eyes Causes serious eye burns.
Signs and Symptoms of Exposure	Central nervous system depression, prolonged or repeated exposure can cause:, Nausea, Headache, Vomiting, narcosis, Drowsiness, Overexposure may cause mild, reversible liver effects.
Additional Information	RTECS: NT8050000

12. ECOLOGICAL INFORMATION

Ecotoxicity	
Persistence and degradability	No available information
Toxicity to fish	LC50 9,640.00 mg/l (Pimephales promelas (fathead minnow)) 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 5,102.00 mg/l (Daphnia magna (Water flea)) 24 h Immobilization EC50 6,851 mg/l (Daphnia magna (Water flea)) 24 h
Toxicity to algae	EC50 > 2,000.00 mg/l (Desmodesmus subspicatus (green algae)) 72 h EC50 > 1.000,00 mg/l (Algae) 24 h
Bioaccumulative potential	No available information
Results of PBT and vPvB assessment	No available information
Mobility	No available information
Other adverse effects	No available information

13. DISPOSAL CONSIDERATIONS

Product	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Dispose of as unused product.

14. TRANSPORT INFORMATION

IATA

UN-Number: 1219 Class: 3 Packing group: II

Proper shipping name: Isopropanol

IMDG

UN-Number: 1219 Class: 3 Packing group: II

Proper shipping name: Isopropanol

EMS-No. F-A, S-I

DOT (US)

UN-Number: 1219 Class: 3 Packing group: II

Proper shipping name: Isopropanol

Marine pollution: No

15. REGULATORY INFORMATION

Hazard statements

H225: Highly flammable liquid and vapour

H319: Causes serious eye irritation

H336: May cause drowsiness or dizziness

Precautionary statements

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P305 + P351 + P338: Rinse cautiously with water for several minutes if in eyes. Remove contact lenses, if present and easy to do.

GHS-Labeling

Pictogram



Signal word *Danger*

Labeling according to EC Directive

Symbol(s): Xi- Irritant F- Highly flammable

R-phrase(s): 11-36-67

Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness.

S-phrase(s): 7-16-24/25-26

Keep container tightly closed. Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

16. OTHER INFORMATION

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