



Isopropyl Alcohol

Safety Data Sheet acc. to 29 CFR 1910.1200 App D

SECTION 1: Identification

1.1 Product identifier

Identification of the substance	Isopropyl Alcohol
CAS number	67-63-0
Alternative name(s)	Propan-2-ol, propan-2-ol
Alternative number(s)	IPA

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	General use
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1.3 Details of the supplier of the safety data sheet

Verax Chemical Company
20102 Broadway Ave
Snohomish WA 98296
United States

Telephone: +1 (360) 668-2431
e-mail: info@veraxproducts.com
Website: www.veraxproducts.com

1.4 Emergency telephone number

Emergency information service	US: (800) 535-5053 INT: 1 (352) 323-3500
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SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section.	Hazard class.	Category.	Hazard class and category.	Hazard statement.
A.3.	Serious eye damage/eye irritation.	2.	Eye Irrit. 2.	H319.
A.8D.	Specific target organ toxicity - single exposure (narcotic effects, drowsiness).	3.	STOT SE 3.	H336.
B.6.	Flammable liquid.	2.	Flam. Liq. 2.	H225.

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word danger

- Pictograms

GHS02, GHS07



- Hazard statements

H225	Highly flammable liquid and vapor.
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.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/eye protection/face protection.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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/doctor if you feel unwell.
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to industrial combustion plant.

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0.1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	Isopropyl Alcohol
Identifiers	
CAS No	67-63-0
Molecular formula	C ₃ H ₈ O
Molar mass	60.1 g/mol

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Rinse immediately carefully and thoroughly with eye shower or water. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Narcotic effects.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up

Advice on how to clean up a spill

dilute with plenty of water

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits).

Country.	Name of agent.	CAS No.	Identifier.	TWA [ppm].	TWA [mg/m ³].	STEL [ppm].	STEL [mg/m ³].	Ceiling-C [ppm].	Ceiling-C [mg/m ³].	Notation.	Source.
US.	2-Propanol.	67-63-0.	TLV®.	200.		400.					ACGIH® 2022.
US.	Isopropyl alcohol.	67-63-0.	PEL (CA).	400.	980.	500.	1,225.				Cal/ OSHA PEL.
US.	Isopropyl alcohol.	67-63-0.	REL.	400 (10 h).	980 (10 h).	500.	1,225.				NIOSH REL.
US.	Isopropyl alcohol.	67-63-0.	PEL.	400.	980.						29 CFR 1910.1000.

Notation

Ceiling-C
STEL

ceiling value is a limit value above which exposure should not occur
short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Biological limit values.

Country.	Name of agent.	Parameter.	Notation.	Identifier.	Value.	Source.
US.	Isopropanol.	Acetone.		BEI®.	40 mg/l.	ACGIH® 2022.

Human health values

Relevant DNELs and other threshold levels.

Endpoint.	Threshold level.	Protection goal, route of exposure.	Used in.	Exposure time.
DNEL.	500 mg/m ³ .	Human, inhalatory.	Worker (industry).	Chronic - systemic effects.
DNEL.	888 mg/kg bw/day.	Human, dermal.	Worker (industry).	Chronic - systemic effects.

Environment values

Relevant PNECs and other threshold levels.

Endpoint.	Threshold level.	Organism.	Environmental compartment.	Exposure time.
PNEC.	140.9 mg/l.	Aquatic organisms.	Freshwater.	Short-term (single instance).
PNEC.	140.9 mg/l.	Aquatic organisms.	Marine water.	Short-term (single instance).
PNEC.	2,251 mg/l.	Aquatic organisms.	Sewage treatment plant (STP).	Short-term (single instance).
PNEC.	552 mg/kg.	Aquatic organisms.	Freshwater sediment.	Short-term (single instance).
PNEC.	552 mg/kg.	Aquatic organisms.	Marine sediment.	Short-term (single instance).
PNEC.	28 mg/kg.	Terrestrial organisms.	Soil.	Short-term (single instance).

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	not determined
Odor	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	not determined
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	not determined
Density	not determined
Vapor density	this information is not available
Relative density	Information on this property is not available

Solubility(ies)

- Water solubility	miscible in any proportion
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Partition coefficient

- n-octanol/water (log KOW)	this information is not available
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Auto-ignition temperature	not determined
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". It's a reactive substance. The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans.

Name of substance.	CAS No.	Classification.	Number.
Isopropyl Alcohol.	67-63-0.	3.	

Legend

3 Not classifiable as to carcinogenicity in humans

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Biodegradation

The substance is readily biodegradable.

Process of degradability.

Process.	Degradation rate.	Time.
Oxygen depletion.	53 %.	5 d.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0.1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Dilute with plenty of water.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number

DOT	UN 1219
IMDG-Code	UN 1219
ICAO-TI	UN 1219

14.2 UN proper shipping name

DOT	Isopropanol
IMDG-Code	ISOPROPANOL
ICAO-TI	Isopropanol

14.3 Transport hazard class(es)

DOT	3
IMDG-Code	3
ICAO-TI	3

14.4 Packing group

DOT	II
IMDG-Code	II
ICAO-TI	II

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Particulars in the shipper's declaration	UN1219, Isopropanol, 3, II
Danger label(s)	3



Special provisions (SP)	IB2, T4, TP1
ERG No	129

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
Danger label(s)	3



Special provisions (SP)	-
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-E, S-D
Stowage category	B

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s) 3



Special provisions (SP) A180

Excepted quantities (EQ) E2

Limited quantities (LQ) 1 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA) substance is listed (ACTIVE)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

not listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings.

Name of substance.	CAS No.	Remarks.	Effective date.
Isopropyl Alcohol.	67-63-0.	Only persons who manufacture by the strong acid process are subject, supplier notification not required.	1986-12-31.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

not listed

Clean Air Act

not listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance.	CAS No.	Functionality.	Authoritative Lists.
Isopropyl Alcohol.	67-63-0.		OEHHA RELS.

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance.	CAS No.	DEP CODE.	PBT / HHS / LHS.	PBT / HHS Threshold.	De Minimis Concentration Threshold.
Isopropyl Alcohol.	67-63-0.				1.0 %.

- Hazardous Substances List (MN-ERTK)

Name of substance.	CAS No.	References.	Remarks.
Isopropyl Alcohol.	67-63-0.	A, N, O.	

Legend

A American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
N National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Safety and Health Standards," August 1988, available from NIOSH, Publications Dissemination Office, Division of Standards Development and Technology Transfer
O Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division

- Hazardous Substance List (NJ-RTK)

Name of substance.	CAS No.	Remarks.	Classifications.
Isopropyl Alcohol.	67-63-0.		F3

Legend

F3 Flammable - Third Degree

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory.	CAS No.	Classification.
2-PROPANOL.	67-63-0.	E.

Legend

E Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance.	CAS No.	References.
Isopropyl Alcohol.	67-63-0.	T, F.

Legend

F Flammability (NFPA®)

T Toxicity (ACGIH®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

not listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category.	Rating.	Description.
Chronic.	1.	None.
Health.	2.	Temporary or minor injury may occur.
Flammability.	3.	Material that can be ignited under almost all ambient temperature conditions.
Physical hazard.	0.	Material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive.
Personal protection.	-.	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category.	Degree of hazard.	Description.
Flammability.	3.	Material that can be ignited under almost all ambient temperature conditions.
Health.	0.	Material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material.
Instability.	0.	Material that is normally stable, even under fire conditions.
Special hazard.		

National inventories

Country.	Inventory.	Status.
US.	TSCA.	Substance is listed.

Legend

TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations.
29 CFR 1910.1000.	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits).
49 CFR US DOT.	49 CFR U.S. Department of Transportation.
ACGIH®.	American Conference of Governmental Industrial Hygienists.
ACGIH® 2022.	From ACGIH®, 2022 TLVs® and BEIs® Book. Copyright 2022. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement .
Cal/OSHA PEL.	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs).

Abbr.	Descriptions of used abbreviations.
CAS.	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances).
Ceiling-C.	Ceiling value.
DEP CODE.	Department of Environmental Protection Code.
DGR.	Dangerous Goods Regulations (see IATA/DGR).
DNEL.	Derived No-Effect Level.
DOT.	Department of Transportation (USA).
EmS.	Emergency Schedule.
ERG No.	Emergency Response Guidebook - Number.
HHS.	Higher hazard substance.
IARC.	International Agency for Research on Cancer.
IATA.	International Air Transport Association.
IATA/DGR.	Dangerous Goods Regulations (DGR) for the air transport (IATA).
ICAO.	International Civil Aviation Organization.
ICAO-TI.	Technical instructions for the safe transport of dangerous goods by air.
IMDG.	International Maritime Dangerous Goods Code.
IMDG-Code.	International Maritime Dangerous Goods Code.
LHS.	Lower hazard substance.
NFPA®.	National Fire Protection Association (United States).
NIOSH REL.	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs).
NPCA-HMIS® III.	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition.
OSHA.	Occupational Safety and Health Administration (United States).
PBT.	Persistent, Bioaccumulative and Toxic.
PEL.	Permissible exposure limit.
PNEC.	Predicted No-Effect Concentration.
Ppm.	Parts per million.
STEL.	Short-term exposure limit.
TLV®.	Threshold Limit Values.
TWA.	Time-weighted average.
VPvB.	Very Persistent and very Bioaccumulative.

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code.	Text.
H225.	Highly flammable liquid and vapor.
H319.	Causes serious eye irritation.
H336.	May cause drowsiness or dizziness.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. Date of compilation. 2023-11-02.