according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

1 Identification

· Product identifier

· Trade name: Isopropanol, 20% v/v

· Product code: IP1020SS

· Recommended use and restriction on use

· Recommended use: Laboratory chemicals

· Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331 USA

Tel +1 (717)632-1291

Toll-Free: (866)632-1291 info@aquaphoenixsci.com

Emergency telephone number:

ChemTel

1-800-255-3924 (North America)

+1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

Flam. Liq. 3 H226 Flammable liquid and vapor.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:





GHS02 GHS07

Signal word: Warning

· Hazard statements:

H226 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.

P233 Keep container tightly closed.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing mist, vapors, or spray. P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves and eye protection.

(Cont'd. on page 2)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

Trade name: Isopropanol, 20% v/v

(Cont'd. of page 1)

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.

P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use for extinction: Alcohol resistant foam or water spray.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:					
67-63-0	Propan-2-ol	20%			
	Flam. Liq. 2, H225 Eye Irrit. 2A, H319; STOT SE 3, H336				
7732-18-5	Water	80%			

· Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: If experiencing respiratory symptoms: Call a doctor.
- · After skin contact:

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation continues, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· Most important symptoms and effects, both acute and delayed:

Coughing

Dizziness

Causes eye irritation.

Gastric or intestinal disorders when ingested.

- · Danger: May cause drowsiness or dizziness.
- · Indication of any immediate medical attention and special treatment needed:

(Cont'd. on page 3)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

Trade name: Isopropanol, 20% v/v

(Cont'd. of page 2)

If necessary oxygen respiration treatment.

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

Alcohol resistant foam

Water fog / haze

Carbon dioxide

Gaseous extinguishing agents

Fire-extinguishing powder

- · For safety reasons unsuitable extinguishing agents: None.
- Special hazards arising from the substance or mixture

Flammable liquid and vapor.

Formation of toxic gases is possible during heating or in case of fire.

- · Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

· Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable receptacles.

· 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.

7 Handling and storage

- · Handling
- Precautions for safe handling:

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

Information about protection against explosions and fires:

(Cont'd. on page 4)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

Trade name: Isopropanol, 20% v/v

(Cont'd. of page 3)

Keep ignition sources away - Do not smoke.

Flammable gas-air mixtures may be formed in empty containers/receptacles.

Flammable liquid and vapor.

- Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles:

Store in cool, dry conditions in well sealed receptacles.

Avoid storage near extreme heat, ignition sources or open flame.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

- · Further information about storage conditions: Keep containers tightly sealed.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

- · Control parameters
- Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

67-63-0 Propan	67-63-0 Propan-2-ol			
PEL (USA)	Long-term value: 980 mg/m³, 400 ppm			
REL (USA)	Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm			
TLV (USA)	Short-term value: 984 mg/m³, 400 ppm Long-term value: 492 mg/m³, 200 ppm BEI			
EL (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm			
EV (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm			
LMPE (Mexico)	Short-term value: 400 ppm Long-term value: 200 ppm A4, IBE			

Ingredients with biological limit values:

67-63-0 Propan-2-ol

BEI (USA) 40 mg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: Acetone (background, nonspecific)

- · Exposure controls
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

(Cont'd. on page 5)

(Cont'd. of page 4)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

Trade name: Isopropanol, 20% v/v

• Engineering controls: Provide adequate ventilation.

• Breathing equipment: Suitable respiratory protective device recommended.

Protection of hands:



Protective gloves

· Material of gloves

Nitrile rubber, NBR

Butyl rubber, BR

Neoprene gloves

Natural rubber, NR

Sensibilization by the components in the glove materials is possible.

Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- · Body protection: Protective work clothing
- · Limitation and supervision of exposure into the environment

No relevant information available.

· Risk management measures No relevant information available.

9 Physical and chemical properties Information on basic physical and chemical properties · Appearance: Form: Liquid Color: Colorless Alcohol-like · Odor: · Odor threshold: Not determined. Not determined. · pH-value: Melting point/Melting range: -7 °C (19.4 °F) Boiling point/Boiling range: >78 °C (>172.4 °F) · Flash point: 29.4 °C (84.9 °F) Not applicable. · Flammability (solid, gaseous): 425 °C (797 °F) Auto-ignition temperature: Decomposition temperature: Not determined. Product is not explosive. However, formation of explosive air/ Danger of explosion: vapor mixtures are possible. · Explosion limits Lower: Not determined. Upper: Not determined. · Oxidizing properties: Non-oxidizing. (Cont'd. on page 6)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

Trade name: Isopropanol, 20% v/v

		(Cont'd. of page
Vapor pressure:	Not determined.	
Density at 20 °C (68 °F):	0.96 g/cm³ (8.01 lbs/gal)	
Relative density:	Not determined.	
Vapor density:	Not determined.	
Evaporation rate:	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wa	ater): Not determined.	
Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Other information	No relevant information available.	

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions

Flammable liquid and vapor.

Reacts with oxidizing agents.

Used empty containers may contain product gases which form explosive mixtures with air.

- · Conditions to avoid Keep ignition sources away Do not smoke.
- · Incompatible materials Oxidizing agents.
- · Hazardous decomposition products

Under fire conditions only:

Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- · LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Inhalative LC50/4h 150 mg/l (rat)

- · Primary irritant effect:
- On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Causes eye irritation.
- Sensitization: Based on available data, the classification criteria are not met.
- · IARC (International Agency for Research on Cancer):

67-63-0 Propan-2-ol

(Cont'd. on page 7)

Page: 7/10

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

Trade name: Isopropanol, 20% v/v

(Cont'd. of page 6)

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity):

Causes serious eye irritation.

Vapors have narcotic effect.

- · Repeated dose toxicity: No relevant information available.
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: May cause drowsiness or dizziness.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- · Toxicity
- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.
- · Additional ecological information
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

(Cont'd. on page 8)

Safety Data Sheet according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

Trade name: Isopropanol, 20% v/v

	(Cont'd. of page 7
· UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	UN1987
· UN proper shipping name · DOT · ADR/RID/ADN, IMDG, IATA	Alcohols, n.o.s. (Isopropanol Solution)) ALCOHOLS, N.O.S. (ISOPROPANOL SOLUTION)
Transport hazard class(es)	
· DOT	
· Class · Label	3 3
· ADR/RID/ADN	
· Class · Label	3 (F1) 3
· IMDG, IATA	3
Class	3
Label	3
· Packing group · DOT, ADR/RID/ADN, IMDG, IATA	III
Environmental hazards	Not applicable.
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number:	Warning: Flammable liquids 30 F-E, <u>S-E</u>
Transport in bulk according to Annex II o MARPOL73/78 and the IBC Code	f Not applicable.

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA

(Cont'd. on page 9)

Page: 9/10

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

Trade name: Isopropanol, 20% v/v

(Cont'd. of page 8)

· Section 302 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

67-63-0 Propan-2-ol

· TSCA (Toxic Substances Control Act)

All ingredients are listed or exempt.

· Proposition 65 (California)

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

67-63-0 Propan-2-ol

3

· Canadian Domestic Substances List (DSL):

All ingredients listed on DSL or NDSL.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Flam. Liq. 2: Flammable liquids - Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN:

(Cont'd. on page 10)

Page: 10/10

Safety Data Sheet according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 17, 2020

Trade name: Isopropanol, 20% v/v

(Cont'd. of page 9)

978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers