

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.08.2015

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Isopropanol, Tech Grade,99%

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Isopropanol, Tech Grade,99%

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25372A

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Flammable

Flammable liquids, category 2



Irritant

Eye irritation, category 2A

Specific target organ toxicity following single exposure, category 3

Flammable liq. 2

Eye Irrit. 2

Stot SE. 3

Signal word :Danger

Hazard statements:

Highly flammable liquid and vapour

Causes serious eye irritation

May cause drowsiness or dizziness

Precautionary statements:

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

Keep out of reach of children

Read label before use

Keep container tightly closed

Wash ... thoroughly after handling

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

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/light/.../equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Use only outdoors or in a well-ventilated area

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Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapours/spray

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

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 advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use ... for extinction

Store in a well ventilated place. Keep container tightly closed

Store in a well ventilated place. Keep cool

Store locked up

Dispose of contents/container to ...

Other Non-GHS Classification:

WHMIS



NFPA/HMIS



NFPA SCALE (0-4)

Health	2
Flammability	3
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:

CAS 67-63-0	Isopropanol	100 %
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Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists.

After skin contact: Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical attention if irritation persists or if concerned.

After eye contact: Protect unexposed eye. Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

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After swallowing: Induce vomiting. Dilute mouth with water or milk after rinsing. Immediately get medical assistance.

Most important symptoms and effects, both acute and delayed:

Shortness of breath. Irritation. Nausea. Headache.;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Water spray can be used to dilute spills to nonflammable mixtures.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Advice for firefighters:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Ensure adequate ventilation. Avoid contact with skin, eyes, and clothing. Do not inhale gases, fumes, dust, mist, vapor, and aerosols.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Keep away from ignition sources. Protect from heat. Ensure that dust-handling systems (exhaust ducts, dust collectors, vessels, and processing equipment) are designed to prevent the escape of dust into the work area.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Should not be released into environment.

Methods and material for containment and cleaning up:

Use spark-proof tools and explosion-proof equipment. Have fire extinguishing agent available in case of fire. Always obey local regulations. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. Remove all sources of ignition. Contain spill then collect. Do not flush to sewer. Absorb with a noncombustible absorbent material such as sand or earth and containerize for disposal. Refer to Section 13. Ventilate area of spill.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke, or use personal products when handling chemical substances. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Empty containers retain product residue and can be dangerous.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Store securely in flammable storage area away from sources of ignition. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Keep container tightly sealed. Protect from freezing and physical damage. Store away from incompatible materials.

SECTION 8 : Exposure controls/personal protection

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Control Parameters:

67-63-0, Isopropanol, ACGIH: 400 ppm STEL; 200 ppm TWA
67-63-0, Isopropanol , NIOSH: 500 ppm STEL; 1225 mg/m³ STEL
67-63-0, Isopropanol , NIOSH: 400 ppm TWA; 980 mg/m³ TWA

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection:

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation.

Eye protection:

Safety glasses with side shields or goggles.

General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Perform routine housekeeping. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Clear colorless liquid	Explosion limit lower: Explosion limit upper:	2% 12.7%
Odor:	Alcohol	Vapor pressure:	Approx 33 at 20°C
Odor threshold:	Not Available	Vapor density:	Not Available
pH-value:	Not Available	Relative density:	0.785 g/mL at 25°C
Melting/Freezing point:	Below -88°C	Solubilities:	Infinite solubility
Boiling point/Boiling range:	Approx 82°C	Partition coefficient (n-octanol/water):	log Pow: 0.05
Flash point (closed cup):	12.0°C	Auto/Self-ignition temperature:	425.0°C
Evaporation rate:	3.0	Decomposition temperature:	Not Available
Flammability (solid,gaseous):	Flammable	Viscosity:	a. Kinematic:Not Available b. Dynamic: Not Available
Density: Not Available			

SECTION 10 : Stability and reactivity

Reactivity:None under normal processing.

Chemical stability:No decomposition if used and stored according to specifications.Stable under normal conditions.

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Possible hazardous reactions:None under normal processing.

Conditions to avoid:Incompatible materials.

Incompatible materials:Strong oxidizers, heat, sparks, open flames. Will attack some forms of rubber, plastics and coatings. May react with metallic aluminum and generate hydrogen gas.

Hazardous decomposition products:Toxic oxides of carbon, acrid and irritating fumes.

SECTION 11 : Toxicological information

Acute Toxicity:		
Dermal:	(rabbit)	LD-50 15800 mg/kg
Oral:	(rat)	LD-50 5628 mg/kg
Inhalation:	(rat)	LC-50 130,7 mg/l
Chronic Toxicity: No additional information.		
Corrosion Irritation: No additional information.		
Sensitization:	No additional information.	
Single Target Organ (STOT):	No additional information.	
Numerical Measures:	No additional information.	
Carcinogenicity:	No additional information.	
Mutagenicity:	No additional information.	
Reproductive Toxicity:	No additional information.	

SECTION 12 : Ecological information

Ecotoxicity

Water Flea: 48 Hr EC50 Daphnia magna: 13299 mg/L

Algae: 96 Hr EC50 Desmodesmus subspicatus: >1000 mg/L

Algae: 72 Hr EC50 Desmodesmus subspicatus: >1000 mg/L

Fish: 96 Hr LC50 Pimephales promelas: 9640 mg/L

Fish: 96 Hr LC50 Pimephales promelas: 11130 mg/L

Fish: 96 Hr LC50 Lepomis macrochirus: >1400000 µg/L

Persistence and degradability:

Bioaccumulative potential:

Mobility in soil: Aqueous solution has high mobility in soil.

Other adverse effects: Isopropanol has acute toxicity with effects of death in animals and low growth rates and death in plants. Chronic toxic effects, may be shortened life span, lower fertility, reproductive problems, and changes in appearance and/or behavior in animals

SECTION 13 : Disposal considerations

Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Remove all sources of ignition. Do not flush to sewer. Have fire extinguishing agent available in case of fire. Chemical waste generators must determine whether a discarded

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chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number

UN1219

UN proper shipping name

Isopropanol

Transport hazard class(es)



Class:

3 Flammable liquids

Packing group:II

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic, Fire

SARA Section 313 (Specific toxic chemical listings):

67-63-0 Isopropanol

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

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None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

67-63-0 Isopropanol

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

PNEC: Predicted No-Effect Concentration (REACH)

CFR: Code of Federal Regulations (USA)

SARA: Superfund Amendments and Reauthorization Act (USA)

RCRA: Resource Conservation and Recovery Act (USA)

TSCA: Toxic Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

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