Printing date 05/03/2023

Reviewed on 05/03/2023

1 Identification

- · Product identifier
- · Trade name: Isopropyl Alcohol, HPLC Grade
- · Article number: 17604
- · CAS Number:
- 67-63-0
- *EC number:* 200-661-7
- · Index number:
- 603-117-00-0
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
 Manufacturer/Supplier: Aqua Solutions, Inc.
 6913 Highway 225 DEER PARK, TX 77536 USA
 800-256-2586
- Information department: techservices@ofite.com Technical Coordinator Sherman Nelson shermann@aquasolutions.org
 Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666

2 Hazard(s) identification

· Classification of the substance or mixture

GHS02 Flame

Flammable Liquids 2

GHS07

H319 Causes serious eye irritation.

H225 Highly flammable liquid and vapor.

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

· Label elements

Eye Irritation 2A

• *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



• Signal word Danger • Hazard statements Highly flammable liquid and vapor. Causes serious eye irritation.

(Contd. on page 2)

[–] US

Printing date 05/03/2023

Reviewed on 05/03/2023

Trade name: Isopropyl Alcohol, HPLC Grade

(Contd. of page	e 1)
May cause drowsiness or dizziness.	
· Precautionary statements	
Keep away from heat/sparks/open flames/hot surfaces No smoking.	
Keep container tightly closed.	
Ground/bond container and receiving equipment.	
Use explosion-proof electrical/ventilating/lighting/equipment.	
Use only non-sparking tools.	
Take precautionary measures against static discharge.	
Avoid breathing dust/fume/gas/mist/vapors/spray	
Wash thoroughly after handling.	
Use only outdoors or in a well-ventilated area.	
Wear protective gloves/protective clothing/eye protection/face protection.	
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.	
IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to a	lo.
Continue rinsing.	
Call a poison center/doctor if you feel unwell.	
If eye irritation persists: Get medical advice/attention.	
In case of fire: Use water to extinguish.	
Store in a well-ventilated place. Keep cool.	
Store locked up.	
Dispose of contents/container in accordance with local/regional/national/international regulations.	
• Classification system:	
· NFPA ratings (scale 0 - 4)	
· MTTA raungs (scale 0 - 4)	
Health = 2	
Fire = 3	
$\frac{2}{Reactivity} = 0$	
$\checkmark \land \land$	
· HMIS-ratings (scale 0 - 4)	
$\frac{\text{HEALTH}}{2} Health = 2$	
FIRE 3 $Fire = 3$	
REACTIVITY Reactivity = 0	
• Other hazards	
· Results of PBT and vPvB assessment	
• PBT: Not applicable.	
• vPvB: Not applicable.	
3 Composition/information on ingredients	
· Chemical characterization: Substances	
· CAS No. Description	
CAS: 67-63-0 Isopropanol	
· Identification number(s)	

- Identification number(s)
 EC number: 200-661-7
- Index number: 603-117-00-0

4 First-aid measures

· Description of first aid measures

• After inhalation: Supply fresh air; consult doctor in case of complaints.

(Contd. on page 3)

Printing date 05/03/2023

Reviewed on 05/03/2023

(Contd. of page 2)

Trade name: Isopropyl Alcohol, HPLC Grade

- After skin contact: Generally the product does not irritate the skin.
- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- *Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.*
- Environmental precautions: Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.
- **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.
- · Protective Action Criteria for Chemicals
- PAC-1: 400 ppm
- · PAC-2: 2000* ppm
- · PAC-3: 12000** ppm

7 Handling and storage

- · Handling:
- Precautions for safe handling No special precautions are necessary if used correctly.
- *Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.*
- Protect against electrostatic charges.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- \cdot Further information about storage conditions:
- Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 4)

US

Printing date 05/03/2023

Reviewed on 05/03/2023

(Contd. of page 3)

Trade name: Isopropyl Alcohol, HPLC Grade

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see section 7.

· Control parameters

• Components with limit values that require monitoring at the workplace:

CAS: 67-63-0 Isopropanol

PEL Long-term value: 980 mg/m³, 400 ppm

- REL Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm
- TLV Short-term value: 400 ppm Long-term value: 200 ppm BEI, A4

· Ingredients with biological limit values:

CAS: 67-63-0 Isopropanol

BEI 40 mg/L

LD50 Intraperitoneal: urine Time: end of shift at end of workweek LD50: Acetone (background, nonspecific)

• Additional information: The lists that were valid during the creation were used as basis.

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation • Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

(Contd. on page 5)

US

Printing date 05/03/2023

*

Reviewed on 05/03/2023

(Contd. of page 4)

Trade name: Isopropyl Alcohol, HPLC Grade

· Body protection: Protective work clothing

9 Physical and chemical proper	ties
· Information on basic physical and · General Information	chemical properties
· Appearance:	
Form:	Fluid
Color:	Clear Alcohol-like
• Odor: • Odor threshold:	Not determined.
· pH-value:	Not determined.
-	Noi determined.
• Change in condition	
Melting point/Melting range:	$-89.5 ^{\circ}C(-129.1 ^{\circ}F)$
Boiling point/Boiling range:	82 °C (179.6 °F)
· Flash point:	13 °C (55.4 °F)
· Flammability (solid, gaseous):	Highly flammable.
· Auto igniting:	425 °C (797 °F)
· Decomposition temperature:	Not determined.
· Ignition temperature:	Not determined.
• Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	2 Vol %
Upper:	12 Vol %
· Vapor pressure at 20 °C (68 °F):	43 hPa (32.3 mm Hg)
• Density at 20 •C (68 •F):	0.785 g/cm ³ (6.55083 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/wat	er): Not determined.
· Viscosity:	
<i>Dynamic at 20 •C (68 •F):</i>	2.43 mPas
Kinematic:	Not determined.
· Other information	No further relevant information available.

10 Stability and reactivity

• *Reactivity* No further relevant information available.

· Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Possibility of hazardous reactions No dangerous reactions known.

(Contd. on page 6)

US

Printing date 05/03/2023

Reviewed on 05/03/2023

Trade name: Isopropyl Alcohol, HPLC Grade

- · Conditions to avoid No further relevant information available.
- *Incompatible materials:* No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

- Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- \cdot Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) 3
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

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

Water hazard class 1 (Assessment by list): slightly hazardous for water

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

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

· UN-Number		
· DOT, IMDG, IATA	UN1219	

(Contd. of page 5)

Printing date 05/03/2023

Reviewed on 05/03/2023

Trade name: Isopropyl Alcohol, HPLC Grade

	(Contd. of page 6
· UN proper shipping name · DOT, IMDG, IATA	Isopropanol
· Transport hazard class(es)	
·DOT	
RUMMAILE LOUD	
· Class	3 Flammable liquids
·Label	3
· IMDG, IATA	
· Class	3 Flammable liquids
· Label	3
· Packing group · DOT, IMDG, IATA	II
• Environmental hazards: • Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
• Hazard identification number (Kemler code):	
· EMS Number:	В
• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· IMDG	
· Limited quantities (LQ)	1L
\cdot Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN ''Model Regulation'':	UN 1219 ISOPROPANOL, 3, II

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

- Section 355 (extremely hazardous substances): Substance is not listed.
- Section 313 (Specific toxic chemical listings): Substance is listed.
- TSCA (Toxic Substances Control Act): ACTIVE
- · Hazardous Air Pollutants Substance is not listed.

· Proposition 65

- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.

(Contd. on page 8)

⁻ US

Printing date 05/03/2023

Reviewed on 05/03/2023

(Contd. of page 7)

Trade name: Isopropyl Alcohol, HPLC Grade

- Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value) A4
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). *Hazard pictograms*



· Signal word Danger · Hazard statements Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness. · Precautionary statements Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. *Use explosion-proof electrical/ventilating/lighting/equipment.* Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. In case of fire: Use water to extinguish. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Department issuing SDS: Environment protection department.

· Contact:

• Date of preparation / last revision Revision 1.0,05-03-2023: Reviewed SDS for Accuracy. STN Creation date for SDS 10-06-2015. STN 05/03/2023

(Contd. on page 9)

US

Printing date 05/03/2023

Reviewed on 05/03/2023

Trade name: Isopropyl Alcohol, HPLC Grade

	(Contd. of page 8)
· Abbreviations and acronyms:	
IMDG: International Maritime Code for Dangerous Goods	
DOT: US Department of Transportation	
IATA: International Air Transport Association	
EINECS: European Inventory of Existing Commercial Chemical Substances	
CAS: Chemical Abstracts Service (division of the American Chemical Society)	
NFPA: National Fire Protection Association (USA)	
HMIS: Hazardous Materials Identification System (USA)	
PBT: Persistent, Bioaccumulative and Toxic	
vPvB: very Persistent and very Bioaccumulative	
NIOSH: National Institute for Occupational Safety	
OSHA: Occupational Safety & Health	
TLV: Threshold Limit Value	
PEL: Permissible Exposure Limit	
REL: Recommended Exposure Limit	
BEI: Biological Exposure Limit	
Flammable Liquids 2: Flammable liquids – Category 2	
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A	
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3	
• * Data compared to the previous version altered.	