

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/30/2024

Reviewed on 05/30/2024

1 Identification

- **Product identifier**
- **Trade name:** Isopropanol, Electronic
- **Article number:** SPE741
- **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

H225 Highly flammable liquid and vapor.



GHS07

Eye Irritation 2A

H319 Causes serious eye irritation.

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

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



GHS02



GHS07

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

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/30/2024

Reviewed on 05/30/2024

Trade name: **Isopropanol, Electronic**

(Contd. of page 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 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.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 3

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)**

· **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)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/30/2024

Reviewed on 05/30/2024

Trade name: Isopropanol, Electronic

(Contd. of page 2)

- **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.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/30/2024

Reviewed on 05/30/2024

Trade name: *Isopropanol, Electronic*

(Contd. of page 3)

· *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 ppmREL Short-term value: 1225 mg/m³, 500 ppmLong-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

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/30/2024

Reviewed on 05/30/2024

Trade name: Isopropanol, Electronic

(Contd. of page 4)

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**· **Form:** Fluid· **Color:** Clear· **Odor:** Alcohol-like· **Odor threshold:** Not determined.· **pH-value:** Not determined.· **Change in condition**· **Melting point/Melting range:** -89.5 °C (-129.1 °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/cm³ (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/water):** Not determined.· **Viscosity:**· **Dynamic at 20 °C (68 °F):** 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)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/30/2024

Reviewed on 05/30/2024

Trade name: Isopropanol, Electronic

(Contd. of page 5)

- **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.
- **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.

14 Transport information

- **UN-Number**
- **DOT, IMDG, IATA** UNI219

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/30/2024

Reviewed on 05/30/2024

Trade name: *Isopropanol, Electronic*

(Contd. of page 6)

· **UN proper shipping name**
 · **DOT, IMDG, IATA** *Isopropanol*

· **Transport hazard class(es)**· **DOT**

· **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):** *30*· **EMS Number:** *B*

· **Transport in bulk according to Annex II of
 MARPOL73/78 and the IBC Code** *Not applicable.*

· **Transport/Additional information:**· **IMDG**· **Limited quantities (LQ)** *1L*

· **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)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/30/2024

Reviewed on 05/30/2024

Trade name: Isopropanol, Electronic

(Contd. of page 7)

- **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**



GHS02 GHS07

- **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:*
- **Date of preparation / last revision**
 - Revision 1.2, 05/30/2024: Reviewed SDS for accuracy. MH/STN*
 - Creation date for SDS 10-06-2015. STN*
 - 05/30/2024*

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/30/2024

Reviewed on 05/30/2024

Trade name: Isopropanol, Electronic

(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.**

US