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1 Identification · Product identifier • Trade name: Sodium Standard 2.5 ppm w/v in 90:10 v/v IPA/Water • Article number: EV007 · 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: Technical Coordinator Sherman Nelson shermann@aquasolutions.org 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 product is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms GHS02 GHS07 · Signal word Danger · Hazard-determining components of labeling: Isopropanol · Hazard statements Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness. (Contd. on page 2) US

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Trade name: Sodium Standard 2.5 ppm w/v in 90:10 v/v IPA/Water

	(Contd. of page 1)
Precautionary statements	
Keep away from heat/sparks/open flames/hot surfaces No smoking.	
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/sh	ower.
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 pro Continue rinsing.	esent and easy to do.
Call a poison center/doctor if you feel unwell.	
If eye irritation persists: Get medical advice/attention.	
In case of fire: Use CO2, powder or water spray to extinguish.	
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 in accordance with local/regional/national/international regul	lations.
Classification system:	
NFPÅ ratings (scale 0 - 4)	
Health = 2	
Fire = 3	
2 0 Reactivity = 0	
HMIS-ratings (scale 0 - 4)	
HEALTH 2 $Health = 2$	
FIRE 3 $Fire = 3$	
REACTIVITY O <i>Reactivity</i> = 0	
Other hazards	
Results of PBT and vPvB assessment	
PBT: Not applicable.	
vPvB: Not applicable.	
1 1 1 1	
Composition/information on ingredients	
Chemical characterization: Mixtures	
Description: Mixture of the substances listed below with nonhazardous additions.	
Dangerous components:	

· Dangerous components:		
CAS: 67-63-0 Is	opropanol	87.599%
• Table of Nonhaz	ardous Ingredients	
CAS: 7732-18-5		12.399%
CAS: 7697-37-2		0.001%
CAS: 7631-99-4	Sodium Nitrate	0.0004%

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4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.
- · 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). Dispose contaminated material as waste according to section 13. 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: CAS: 67-63-0 Isopropanol CAS: 7697-37-2 Nitric Acid CAS: 7631-99-4 Sodium Nitrate

 · PAC-2:
 CAS: 67-63-0
 Isopropanol
 2000* ppm

 CAS: 7697-37-2
 Nitric Acid
 24 ppm

 CAS: 7631-99-4
 Sodium Nitrate
 45 mg/m³

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400 ppm

0.16 ppm

 $4.1 \, mg/m^3$

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		(Contd. of page 3)
· PAC-3:		
CAS: 67-63-0	Isopropanol	12000** ppm
CAS: 7697-37-2	Nitric Acid	92 ppm
CAS: 7631-99-4	Sodium Nitrate	270 mg/m³

7 Handling and storage

· Handling:

- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- 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.
- 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.

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Trade name: Sodium Standard 2.5 ppm w/v in 90:10 v/v IPA/Water

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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:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves

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 \cdot **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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

· Body protection: Protective work clothing

Information on basic physical and General Information	chemical properties	
Appearance:		
Form:	Liquid	
Color:	Clear	
· Odor:	de l'alcool	
	l	
• Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	82 °C (179.6 °F)	
Flash point:	13 °C (55.4 °F)	

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	in 90:10 v/v IPA/Water

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Flammability (solid, gaseous):	Highly flammable.
Auto igniting:	425 °C (797 °F)
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
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):	0.81167 g/cm ³ (6.77339 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/wate	r): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	87.6 %
Water:	12.4 %
VOC content:	87.60 %
	711.0 g/l / 5.93 lb/gal
Solids content:	0.0 %
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.

· Conditions to avoid No further relevant information available.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known.

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Trade name: Sodium Standard 2.5 ppm w/v in 90:10 v/v IPA/Water

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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:
- The product shows the following dangers according to internally approved calculation methods for preparations: Irritant
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

CAS: 67-63-0 Isopropanol

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is 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 (Self-assessment): 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.

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US

UN-Number DOT, IMDG, IATA	UN1993
UN proper shipping name	
DOT	Flammable liquids, n.o.s. (Isopropanol
IMDG, IATA) FLAMMABLE LIQUID, N.O.S. (Isopropanol)
Transport hazard class(es)	
DOT	
3	
Class	3 Flammable liquids
Label	3
IMDG, IATA	
Class Label	3 Flammable liquids 3
Packing group	II
DOT, IMDG, IATA	11
Environmental hazards: Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
Hazard identification number (Kemler code):	
EMS Number:	<i>F-E</i> , <u><i>S-E</i></u>
Stowage Category	В
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 5 L
	On cargo aircraft only: 60 L
IMDG	
Limited quantities (LQ)	
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

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· UN "Model Regulation":
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UN 1993 FLAMMABLE LIQUID, N.O.S. (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):	
CAS: 7697-37-2 Nitric Acid	
• Section 313 (Specific toxic chemical listings):	
CAS: 67-63-0 Isopropanol	
CAS: 7697-37-2 Nitric Acid	
• TSCA (Toxic Substances Control Act):	
Isopropanol	ACTIV
Water	ACTIV
Nitric Acid	ACTIV
Sodium Nitrate	ACTIV
· Hazardous Air Pollutants	
None of the ingredients is listed.	
· Proposition 65	
· 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.	
· Carcinogenic categories	
· EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
· TLV (Threshold Limit Value)	
CAS: 67-63-0 Isopropanol	A
· NIOSH-Ca (National Institute for Occupational Safety and Health)	·
None of the ingredients is listed.	
• GHS label elements The product is classified and labeled according to the Globally Harmonize	ed System (GHS). (Contd. on page

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Hazard pictograms	
$\wedge \wedge$	
GHS02 GHS07	
01502 011507	
Signal word Danger	
Hazard-determining components of labeling:	
Isopropanol	
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.	
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/show	wer.
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 pres	cent 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 CO2, powder or water spray to extinguish.	
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 in accordance with local/regional/national/international regula	tions.
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, 05/08/2024: Rewiewed SDS for accuracy. MH/STN Revision 0.1 09-26-2018: reviewed and updated SDS. STN 05/09/2024
- 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

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US

	(Cont
ELINCS: European List of Notified Chemical Substances	
CAS: Chemical Abstracts Service (division of the American Chemical Society)	
NFPA: National Fire Protection Association (USA)	
HMIS: Hazardous Materials Identification System (USA)	
VOC: Volatile Organic Compounds (USA, EU)	
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.	