Printing date 04/04/2018 Reviewed on 04/04/2018

1 Identification

· Product identifier

· Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

· Article number: SPX526

· 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 sherman@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

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS07

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

2 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.

· Precautionary statements

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

Ground/bond container and receiving equipment.

(Contd. on page 2)

Printing date 04/04/2018 Reviewed on 04/04/2018

Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

(Contd. of page 1)

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 for extinction: CO2, powder or water spray.

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 regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 3

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



*2 *Health* = *2

Fire = 3

REACTIVITY $\boxed{0}$ Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:	
CAS: 67-63-0 Isopropanol	97.839%
CAS: 67-56-1 Methanol (Methyl Alcohol)	1.621%
. Table of Nonhazardous Ingredients	

Table of Nonhazardous Ingredients

CAS: 124-41-4 Sodium Methoxide (Sodium Methylate)

0.54%

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.

(Contd. on page 3)

Printing date 04/04/2018 Reviewed on 04/04/2018

Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

(Contd. of page 2)

· 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:		
CAS: 67-63-0	Isopropanol	400 ppm
CAS: 67-56-1	Methanol (Methyl Alcohol)	530 ppm
CAS: 124-41-4	Sodium Methoxide (Sodium Methylate)	6.1 mg/m^3
· PAC-2:		
CAS: 67-63-0	Isopropanol	2000* ppm
CAS: 67-56-1	Methanol (Methyl Alcohol)	2,100 ppm
CAS: 124-41-4	Sodium Methoxide (Sodium Methylate)	67 mg/m³
· PAC-3:		
CAS: 67-63-0	Isopropanol	12000** ppm
CAS: 67-56-1	Methanol (Methyl Alcohol)	7200* ppm
CAS: 124-41-4	Sodium Methoxide (Sodium Methylate)	$400 \ mg/m^3$

— US

Printing date 04/04/2018 Reviewed on 04/04/2018

Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

(Contd. of page 3)

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.

· 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 item 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: 984 mg/m³, 400 ppm Long-term value: 492 mg/m³, 200 ppm

BEI

CAS: 67-56-1 Methanol (Methyl Alcohol)

PEL Long-term value: 260 mg/m³, 200 ppm

REL Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm

TLV Short-term value: 328 mg/m³, 250 ppm

Long-term value: 262 mg/m³, 200 ppm

Skin; BEI

· 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)

CAS: 67-56-1 Methanol (Methyl Alcohol)

BEI 15 mg/L

LD50 Intraperitoneal: urine

Time: end of shift

LD50: Methanol (background, nonspecific)

(Contd. on page 5)

Printing date 04/04/2018 Reviewed on 04/04/2018

Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

(Contd. of page 4)

- · 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. 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

9 Physical and chemical properties

· Appearance:	
Form:	Fluid
Color:	Clear
· Odor:	Alcohol-like
· Odor threshold:	Not determined.
· pH-value:	Not determined.

· Information on basic physical and chemical properties

· General Information

· Change in condition Melting point/Melting range: -89.5 °C (-129.1 °F) Boiling point/Boiling range: 82 °C (179.6 °F) 13 °C (55.4 °F) · Flash point: Not applicable. · Flammability (solid, gaseous): 425 °C (797 °F) · Ignition temperature: · Decomposition temperature: Not determined.

(Contd. on page 6)

Printing date 04/04/2018 Reviewed on 04/04/2018

Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

	(Contd. of page
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapo 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):	0.78846 g/cm³ (6.5797 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	e r): Not determined.
Viscosity:	
Dynamic at 20 °C (68 °F):	2.43 mPas
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	99.5 %
VOC content:	99.46 %
	784.2 g/l / 6.54 lb/gl
Solids content:	0.5 %
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.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Oral	LD50	73,238-170,847 mg/kg (rat)
Inhalative	LC50/4h	30.5 mg/l (rat)

(Contd. on page 7)

Printing date 04/04/2018 Reviewed on 04/04/2018

Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

(Contd. of page 6)

			(
CAS: 67-5	6-1 Metho	anol (Methyl Alcohol)	
Oral	LD50	100 mg/kg (ATE)	
Dermal	<i>LD50</i>	300 mg/kg (ATE)	
		3 mg/l (ATE)	
	•	•	

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · 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	

3

· 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.

HS

Printing date 04/04/2018 Reviewed on 04/04/2018

Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

(Contd. of page 7)

4 Transport information	
· UN-Number · DOT, IMDG, IATA	UN1993
	0141773
· UN proper shipping name · DOT	Flammable liquids, n.o.s. (Isopropanol)
· IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (Isopropanol)
· Transport hazard class(es)	
\cdot DOT	
FLAMMARIE LIQUID	
· Class · Label	3 Flammable liquids 3
· IMDG, IATA	
3	
· Class · Label	3 Flammable liquids 3
· Packing group · DOT, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E, <u>S-E</u>
· Stowage Category	В
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	of Not applicable.
\cdot Transport/Additional information:	
$\cdot DOT$	
· Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
\cdot <i>IMDG</i>	
· 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 1993 FLAMMABLE LIQUIDS, N.O.S. (ISOPROPANOL), 3, II

Printing date 04/04/2018 Reviewed on 04/04/2018

Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

(Contd. of page 8)

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

CAS: 67-63-0 Isopropanol

CAS: 67-56-1 Methanol (Methyl Alcohol)

· TSCA (Toxic Substances Control Act):

Isopropanol

Methanol (Methyl Alcohol)

Sodium Methoxide (Sodium Methylate)

- · 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:

CAS: 67-56-1 Methanol (Methyl Alcohol)

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

CAS: 67-63-0 Isopropanol

A4

· 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 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.

Printing date 04/04/2018 Reviewed on 04/04/2018

Trade name: Sodium Methoxide

0.1 Normal in IPA, NIST Traceable

(Contd. of page 9)

· 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/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 for extinction: CO2, powder or water spray.

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 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 0.0, 04-04-2018: Creation date for SDS. STN

04/04/2018 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

 $IATA: International\ Air\ Transport\ Association$

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

 $Flam.\ Liq.\ 2:\ Flammable\ liquids-Category\ 2$

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

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