Printing date 05/10/2023

*

*

Reviewed on 05/10/2023

Identification	
· Product identifier	
Trade name: <u>Ethyl Alcohol, 3A 200 Proof</u> <u>Specially Denatured</u>	
Article number: E2518	
• Details of the supplier of the safety data sh • Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586	acet
 Information department: Technical Coordinator Sherman Nelson shermann@aquasolutions Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666 	org
Hazard(s) identification	
GHS02 Flame	
\mathbf{A}	H225 Highly flammable liquid and vapor. Dosure 2 H371 May cause damage to the central nervous system and the visual organs.
GHS08 Health hazard Specific Target Organ Toxicity - Single Exp GHS07	posure 2 H371 May cause damage to the central nervous system and the visual organs.
GHS08 Health hazard Specific Target Organ Toxicity - Single Exp GHS07 Acute Toxicity - Oral 4 • Label elements • GHS label elements The product is classifi • Hazard pictograms	posure 2 H371 May cause damage to the central nervous system an
GHS08 Health hazard Specific Target Organ Toxicity - Single Exp GHS07 Acute Toxicity - Oral 4 • Label elements • GHS label elements The product is classific • Hazard pictograms	posure 2 H371 May cause damage to the central nervous system at the visual organs. H302 Harmful if swallowed.
GHS08 Health hazard Specific Target Organ Toxicity - Single Exp GHS07 Acute Toxicity - Oral 4 • Label elements • GHS label elements The product is classifi • Hazard pictograms	posure 2 H371 May cause damage to the central nervous system an the visual organs. H302 Harmful if swallowed. ed and labeled according to the Globally Harmonized System (GHS).

Printing date 05/10/2023

Reviewed on 05/10/2023

Trade name: Ethyl Alcohol, 3A 200 Proof Specially Denatured

CAS: 67-56-1 Methanol

	Contd. of page 1)
Harmful if swallowed.	
May cause damage to the central nervous system and the visual organs. • 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.	
Do not breathe dust/fume/gas/mist/vapors/spray.	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Wear protective gloves/protective clothing/eye protection/face protection.	
If swallowed: Call a poison center/doctor if you feel unwell.	
Rinse mouth.	
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.	
IF exposed or concerned: Call a poison center/doctor.	
In case of fire: Use CO2, powder or water spray 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 = 1	
Fire = 3	
\mathbf{U} Reactivity = 0	
· HMIS-ratings (scale 0 - 4)	
$\frac{\text{HEALTH}}{2} Health = 2$	
FIRE 3 $Fire = 3$	
REACTIVITY $\begin{bmatrix} 0 \end{bmatrix}$ 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: 64-17-5 Ethyl Alcohol, Absolute 200 Proof	94.987%

(Contd. on page 3)

5.013%

US

Printing date 05/10/2023

Reviewed on 05/10/2023

Trade name: Ethyl Alcohol, 3A 200 Proof Specially Denatured

(Contd. of page 2)

4 First-aid measures

- · Description of first aid measures
- General information:
- Immediately remove any clothing soiled by the product.
- Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- 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.
- · After swallowing: Immediately call a 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

- During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures	
Mount respiratory protective device.	
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: 64-17-5 Ethyl Alcohol, Absolute 200 Proof	1,800 ppn
CAS: 67-56-1 Methanol	530 ppm
· PAC-2:	
CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof	3300* ppn
CAS: 67-56-1 Methanol	2,100 ppm
	(Contd. on page

Printing date 05/10/2023

Reviewed on 05/10/2023

Trade name: Ethyl Alcohol, 3A 200 Proof Specially Denatured

(Contd. of page 3)

· PAC-3:		
CAS: 64-17-5	Ethyl Alcohol, Absolute 200 Proof	15000* ppm
CAS: 67-56-1	Methanol	7200* ppm

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.
- Keep respiratory protective device available.
- · 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

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 ProofPELLong-term value: 1900 mg/m³, 1000 ppmRELLong-term value: 1900 mg/m³, 1000 ppmRELShort-term value: 1000 ppmA3A3CAS: 67-56-1 MethanolPELLong-term value: 260 mg/m³, 200 ppmRELShort-term value: 325 mg/m³, 250 ppmLong-term value: 260 mg/m³, 200 ppmSkinSkinTLVShort-term value: 260 mg/m³, 200 ppmSkinSkinSkinSkinSkinShort-term value: 200 ppmSkin; BEIShort-term value: 200 ppmSkin; BEIShort-term value: 200 ppmSkin; BEIIngredients with biological limit values:CAS: 67-56-1 MethanolBEI15 mg/LLD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)	Comp	ponents with limit values that require monitoring at the workplace:
REL Long-term value: 1900 mg/m³, 1000 ppm TLV Short-term value: 1000 ppm A3 CAS: 67-56-1 Methanol 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 Skin TLV Short-term value: 260 mg/m³, 200 ppm Skin Long-term value: 250 ppm Long-term value: 250 ppm Skin; BEI • Ingretients with biological limit values: CAS: 67-56-1 Methanol CAS: 67-56-1 Methanol BEI 15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific) Long-term value (background, nonspecific)	CAS:	64-17-5 Ethyl Alcohol, Absolute 200 Proof
TLV Short-term value: 1000 ppm A3 CAS: 67-56-1 Methanol 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 Skin TLV Short-term value: 260 mg/m³, 200 ppm Skin TLV Short-term value: 250 ppm Long-term value: 250 ppm Skin; BEI • Ingretients with biological limit values: CAS: 67-56-1 Methanol BEI 15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)	PEL	Long-term value: 1900 mg/m³, 1000 ppm
A3 CAS: 67-56-1 Methanol 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 Skin TLV Short-term value: 250 ppm Long-term value: 200 ppm Skin; BEI • Ingredients with biological limit values: CAS: 67-56-1 Methanol BEI 15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)	REL	Long-term value: 1900 mg/m³, 1000 ppm
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 Skin TLV Short-term value: 250 ppm Long-term value: 200 ppm Skin; BEI • Ingredients with biological limit values: CAS: 67-56-1 Methanol BEI 15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)		
REL Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin TLV Short-term value: 250 ppm Long-term value: 200 ppm Skin; BEI • Ingredients with biological limit values: CAS: 67-56-1 Methanol BEI 15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)	CAS:	67-56-1 Methanol
Long-term value: 260 mg/m ³ , 200 ppm Skin TLV Short-term value: 250 ppm Long-term value: 200 ppm Skin; BEI Ingredients with biological limit values: CAS: 67-56-1 Methanol BEI 15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)	PEL	Long-term value: 260 mg/m³, 200 ppm
Long-term value: 200 ppm Skin; BEI • Ingredients with biological limit values: CAS: 67-56-1 Methanol BEI 15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)		Long-term value: 260 mg/m ³ , 200 ppm
CAS: 67-56-1 Methanol BEI 15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)		Long-term value: 200 ppm
BEI 15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)	Ingre	dients with biological limit values:
LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)	CAS:	67-56-1 Methanol
(Contil on a	1 1	LD50 Intraperitoneal: urine Time: end of shift
(Conta. on p		(Contd. on page 5

Printing date 05/10/2023

Reviewed on 05/10/2023

Trade name: Ethyl Alcohol, 3A 200 Proof Specially Denatured

• 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.

· 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 · 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 • Appearance:	chemical properties	
Form:	Liquid	
Color:	Clear	
Odor:	Alcohol	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	64 °C (147.2 °F)	
· Flash point:	11 °C (51.8 °F)	

Printing date 05/10/2023

Reviewed on 05/10/2023

Trade name:	Ethyl Alcohol,	3A 200 Proof
	Specially Dena	tured

	(Contd. of page 5
· 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:	3.5 Vol %
Upper:	19 Vol %
· Vapor pressure at 20 °C (68 °F):	59 hPa (44.3 mm Hg)
• Density at 20 °C (68 °F):	0.78945 g/cm³ (6.58796 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:	100.0 %
VOC content:	100.00 %
	789.4 g/l / 6.59 lb/gal
Solids content:	95.0 %
• 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.

(Contd. on page 7)

US

Printing date 05/10/2023

*

Reviewed on 05/10/2023

Trade name: Ethyl Alcohol, 3A 200 Proof Specially Denatured

(Contd. of page 6)

11 Toxicolo	11 Toxicological information			
	• Information on toxicological effects • Acute toxicity:			
	· LD/LC50 values that are relevant for classification:			
ATE (Acu	te Toxicity	e Estimate)		
Oral	LD50	1,995 mg/kg		
Dermal	LD50	5,984 mg/kg		
Inhalative	LC50/4h	59.8 mg/l		
• Sensitizati • Additional The produc Harmful • Carcinoge	 on the skin: No irritant effect. on the eye: No irritating effect. Sensitization: No sensitizing effects known. Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations: Harmful Carcinogenic categories 			
		Agency for Research on Cancer)		
	CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof			
	· NTP (National Toxicology Program)			
None of the	None of the ingredients is listed.			
· OSHA-Ca	· OSHA-Ca (Occupational Safety & Health Administration)			
None of th	None of the incredients is listed			

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:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- \cdot 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.
- $\cdot \textit{Other adverse effects No further relevant information available}.$

13 Disposal considerations

· Waste treatment methods

· Recommendation:

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

(Contd. on page 8)

Reviewed on 05/10/2023

Trade name: Ethyl Alcohol, 3A 200 Proof Specially Denatured

(Contd. of page 7)

· Uncleaned packagings:

Printing date 05/10/2023

• Recommendation: Disposal must be made according to official regulations.

• Recommended cleansing agent: Water, if necessary with cleansing agents.

· UN-Number · DOT, IMDG, IATA	UN1987
· UN proper shipping name · DOT · IMDG, IATA	Alcohols, n.o.s. (Ethanol, Methanol) ALCOHOLS, N.O.S. (Ethanol, Methanol)
· Transport hazard class(es)	
DOT	
· Class	3 Flammable liquids
· Label	3
• Class • Label	3 Flammable liquids 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:	- 33 F-E,S-D
Stowage Category	B
• 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)	1L

ACTIVE

ACTIVE

Safety Data Sheet acc. to OSHA HCS

Printing date 05/10/2023

Reviewed on 05/10/2023

	(Contd. of
· 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 1987 ALCOHOLS, N.O.S. (ETHANOL, METHANOL), 3,
Regulatory information	

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

CAS: 67-56-1 Methanol

• TSCA (Toxic Substances Control Act): Ethyl Alcohol, Absolute 200 Proof

Methanol

· Hazardous Air Pollutants

CAS: 67-56-1 Methanol

· 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:

All ingredients are listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

• 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*



(Contd. on page 10)

AЗ

Printing date 05/10/2023

Reviewed on 05/10/2023

Trade name: Ethyl Alcohol, 3A 200 Proof Specially Denatured

• Signal word Danger	(Contd. of page 9)
· Hazard-determining components of labeling:	
Methanol	
· Hazard statements	
Highly flammable liquid and vapor.	
Harmful if swallowed.	
May cause damage to the central nervous system and the visual organs.	
· 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.	
Do not breathe dust/fume/gas/mist/vapors/spray.	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Wear protective gloves/protective clothing/eye protection/face protection.	
If swallowed: Call a poison center/doctor if you feel unwell.	
Rinse mouth.	
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.	
IF exposed or concerned: Call a poison center/doctor.	
In case of fire: Use CO2, powder or water spray 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 05/10/2023, reviewed SDS for accuracy. STN Revision 0.0, 06-07-2019: Creation date for SDS. STN 05/10/2023 • 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 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

(Contd. on page 11)

US

Printing date 05/10/2023

Reviewed on 05/10/2023

Trade name: Ethyl Alcohol, 3A 200 Proof Specially Denatured

(Contd. of page 10)

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit Flammable Liquids 2: Flammable liquids – Category 2 Acute Toxicity - Oral 4: Acute toxicity – Category 4 Specific Target Organ Toxicity - Single Exposure 2: Specific target organ toxicity (single exposure) – Category 2 • * Data compared to the previous version altered.