Printing date 03/03/2022

Reviewed on 03/03/2022

#### **1** Identification

- · Product identifier
- · Trade name: Ethyl Alcohol CDA-19-1, 200 Proof
- Article number: E2542
- CAS Number: 64-17-5
- *EC number*:
- 200-578-6 • Index number:
- 603-002-00-5
- 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
- Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666

#### 2 Hazard(s) identification

· Classification of the substance or mixture



Flammable Liquids 2 H225 Highly flammable liquid and vapor.

· Label elements

- · 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.
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.
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.

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In case of fire: Use CO2, powder or water spray to extinguish. Store in a well-ventilated place. Keep cool. Dispose of contents/container in accordance with local/regional/national/international regulation • Classification system: • NFPA ratings (scale 0 - 4)	(Contd. of page 1)
4 = 2 $Fire = 3$ $Reactivity = 0$	
HMIS-ratings (scale $0 - 4$ )HEALTH2FIRE3REACTIVITY $0$	
<ul> <li>Other hazards</li> <li>Results of PBT and vPvB assessment</li> <li>PBT: Not applicable.</li> <li>vPvB: Not applicable.</li> </ul>	

## **3** Composition/information on ingredients

- Chemical characterization: Substances • CAS No. Description
- CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof
- · Identification number(s)
- EC number: 200-578-6
- Index number: 603-002-00-5

#### 4 First-aid measures

- $\cdot$  Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- $\cdot \textit{After skin contact:}$  Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- 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.

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## 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:** 1,800 ppm
- PAC-2: 3300\* ppm
- **PAC-3:** 15000\* 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:
- $\cdot$  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.
- $\cdot$  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

 $\cdot$  Components with limit values that require monitoring at the workplace:

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

- PEL Long-term value: 1900 mg/m<sup>3</sup>, 1000 ppm
- REL Long-term value: 1900 mg/m<sup>3</sup>, 1000 ppm
- *TLV* Short-term value: 1000 ppm A3
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.

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- · 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  $\cdot$  *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.
- · 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

	to an instance of the
Information on basic physical and c General Information	hemical properties
Appearance:	
Form:	Liquid
Color:	Colorless
Odor:	Alcohol-like
Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	-114 °C (-173.2 °F)
Boiling point/Boiling range:	78.3 °C (172.9 °F)
Flash point:	13 °C (55.4 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	425 °C (797 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Not determined.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapo mixtures are possible.
Explosion limits:	
Lower:	3.5 Vol %
Upper:	19 Vol %
Vapor pressure at 20 $\bullet C$ (68 $\bullet F$ ):	59 hPa (44.3 mm Hg)
Density at 20 °C (68 °F):	0.78934 g/cm <sup>3</sup> (6.58704 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.

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		(Contd. of page 4)
· Evaporation rate	Not determined.	
• Solubility in / Miscibility with Water at 20 °C (68 °F):	1,000 g/l	
· Partition coefficient (n-octanol/wo	uter): Not determined.	
· Viscosity:		
<i>Dynamic at 20 •C (68 •F):</i>	1.2 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.
- · 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: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) 1
- · 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.

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· 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	UN1170	
UN proper shipping name		
DOT	Ethanol	
IMDG, IATA	ETHANOL	
Transport hazard class(es)		
DOT		
RAMABLE 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	): 33	
EMS Number:	F-E,S-D	
Stowage Category	A	
Transport in bulk according to Annex II of		

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Trade name: Ethyl Alcohol CDA-19-1, 200 Proof

	(Contd. of page 6)
· Transport/Additional information:	
·DOT	
· Quantity limitations	On passenger aircraft/rail: 5 L
	On cargo aircraft only: 60 L
· IMDG	
· Limited quantities (LQ)	1L
$\cdot$ Excepted quantities ( $\widetilde{EQ}$ )	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN ''Model Regulation'':	UN 1170 ETHANOL, 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 not 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.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- · TLV (Threshold Limit Value) A3
- · 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.
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.
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.
In case of fire: Use CO2, powder or water spray to extinguish.

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Store in a well-ventilated place. Keep cool.

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 Creation date for SDS 08/14/2018. STN 03/03/2022 / 1.1
- · 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 Flammable Liquids 2: Flammable liquids – Category 2  $\cdot$  \* Data compared to the previous version altered.