Printing date 07/25/2024 Reviewed on 07/25/2024

1 Identification

· Product identifier

· Trade name: Ethyl Alcohol CDA 20, 200 Proof (55gal drum)

· Article number: E2545

**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



GHS02

- · 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.

(Contd. on page 2)



Reviewed on 07/25/2024 Printing date 07/25/2024

Trade name: Ethyl Alcohol CDA 20, 200 Proof (55gal drum)

(Contd. of page 1)

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 regulations.

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



Health = 2Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2Fire = 3

- · 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: 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

- · 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.
- · 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.

Printing date 07/25/2024 Reviewed on 07/25/2024

Trade name: Ethyl Alcohol CDA 20, 200 Proof (55gal drum)

(Contd. of page 2)

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

PEL Long-term value: 1900 mg/m³, 1000 ppm REL Long-term value: 1900 mg/m³, 1000 ppm

TLV Short-term value: 1000 ppm

A:

- · 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.

(Contd. on page 4)

Printing date 07/25/2024 Reviewed on 07/25/2024

Trade name: Ethyl Alcohol CDA 20, 200 Proof (55gal drum)

(Contd. of page 3)

- · 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

· Body protection: Protective work clothing

9 Physical and chemical propert	Physical and chemical properties		
· Information on basic physical and chemical properties · General Information · Appearance:			
Form:	Liquid		
Color:	Colorless		
Odor:	Alcohol-like		
· Odor threshold:	Not determined.		
· pH-value:	Not determined.		
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	-114 °C (-173.2 °F) 78.3 °C (172.9 °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: Upper:	3.5 Vol % 19 Vol %		
· Vapor pressure at 20 °C (68 °F): · Vapor pressure at 50 °C (122 °F):	59 hPa (44.3 mm Hg) 280 hPa (210 mm Hg)		
· Density at 20 °C (68 °F): · Relative density	0.78934 g/cm³ (6.58704 lbs/gal) Not determined.		

(Contd. on page 5)

Printing date 07/25/2024 Reviewed on 07/25/2024

Trade name: Ethyl Alcohol CDA 20, 200 Proof (55gal drum)

		(Contd. of page
· Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water at 20 °C (68 °F):	$1,000 \mathrm{g/l}$	
Partition coefficient (n-octanol/wa	iter): Not determined.	
· Viscosity:		
Dynamic at 20 °C (68 °F):	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.

(Contd. on page 6)

Printing date 07/25/2024 Reviewed on 07/25/2024

Trade name: Ethyl Alcohol CDA 20, 200 Proof (55gal drum)

(Contd. of page 5)

- · 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.

Transport information	
UN-Number DOT, IMDG, IATA	UN1170
UN proper shipping name DOT IMDG, IATA	Ethanol ETHANOL
Transport hazard class(es)	
DOT	
PLANMARIE LIQUID	
Class	3 Flammable liquids
Label	3
3	
Class	3 Flammable liquids
Label	3
Packing group	II
DOT, IMDG, IATA	11
Environmental hazards:	N.
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
Hazard identification number (Kemler code): EMS Number:	33 F-E,S-D
EMS Number: Stowage Category	A A

(Contd. on page 7)

Printing date 07/25/2024 Reviewed on 07/25/2024

Trade name: Ethyl Alcohol CDA 20, 200 Proof (55gal drum)

	(Contd. of page
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 5 L
	On cargo aircraft only: 60 L
IMDG	
Limited quantities (LQ)	IL
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 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.

(Contd. on page 8)

Printing date 07/25/2024 Reviewed on 07/25/2024

Trade name: Ethyl Alcohol CDA 20, 200 Proof (55gal drum)

(Contd. of page 7)

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:

· Date of preparation / last revision

Revision 1.2, 07-25-2024: Reviewed SDS for accuracy. STN/GW

Creation date for SDS 08/14/2018. STN

07/25/2024 / -

· 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

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

* * Data compared to the previous version altered.

-US