

# Safety Data Sheet

acc. to OSHA HCS

Printing date 11/20/2017

Reviewed on 11/20/2017

## 1 Identification

- **Product identifier**
- **Trade name:** EDC Standard  
200 ppm w/v in Methanol
- **Article number:** GEI032
- **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.



GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02



GHS06



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Methanol (Methyl Alcohol)
- **Hazard statements**  
Highly flammable liquid and vapor.  
Toxic if inhaled.

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*Causes damage to organs.*

· **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.*

*Do not breathe dust/fume/gas/mist/vapors/spray.*

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*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.*

*Specific treatment (see on this label).*

*In case of fire: Use for extinction: CO<sub>2</sub>, 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 = 1

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 3

Fire = 3

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: 67-56-1 | Methanol (Methyl Alcohol) | 99.975% |
|--------------|---------------------------|---------|

· **Table of Nonhazardous Ingredients**

|               |  |         |
|---------------|--|---------|
| CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride) | 0.0253% |
|---------------|--|---------|

US

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## 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
*Immediately remove any clothing soiled by the product.*  
*Remove breathing apparatus only after contaminated clothing have been completely removed.*  
*In case of irregular breathing or respiratory arrest provide artificial respiration.*
- **After inhalation:**  
*Supply fresh air or oxygen; call for doctor.*  
*In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. Then 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:**  
*CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*
- **For safety reasons unsuitable extinguishing agents:** *Water with full jet*
- **Special hazards arising from the substance or mixture** *No further relevant information available.*
- **Advice for firefighters**
- **Protective equipment:** *Mouth respiratory protective device.*

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
*Wear protective equipment. Keep unprotected persons away.*
- **Environmental precautions:** *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 item 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: 67-56-1  | Methanol (Methyl Alcohol)                | 530 ppm |
| CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride) | 50 ppm  |

- **PAC-2:**

|               |  |           |
|---------------|--|-----------|
| CAS: 67-56-1  | Methanol (Methyl Alcohol)                | 2,100 ppm |
| CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride) | 200 ppm   |

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· **PAC-3:**

|               |  |           |
|---------------|--|-----------|
| CAS: 67-56-1  | Methanol (Methyl Alcohol)                | 7200* ppm |
| CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride) | 300 ppm   |

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
*Ensure good ventilation/exhaustion at the workplace.  
 Open and handle receptacle with care.*
- **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 item 7.*
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

|   |  |
|---|--|
| <b>CAS: 67-56-1 Methanol (Methyl Alcohol)</b> |  |
| PEL   | Long-term value: 260 mg/m <sup>3</sup> , 200 ppm   |
| REL   | Short-term value: 325 mg/m <sup>3</sup> , 250 ppm<br>Long-term value: 260 mg/m <sup>3</sup> , 200 ppm<br>Skin      |
| TLV   | Short-term value: 328 mg/m <sup>3</sup> , 250 ppm<br>Long-term value: 262 mg/m <sup>3</sup> , 200 ppm<br>Skin; BEI |

· **Ingredients with biological limit values:**

|   |  |
|---|--|
| <b>CAS: 67-56-1 Methanol (Methyl Alcohol)</b> |  |
| BEI   | 15 mg/L<br>LD50 Intraperitoneal: urine<br>Time: end of shift<br>LD50: Methanol (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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*Immediately remove all soiled and contaminated clothing.*

*Wash hands before breaks and at the end of work.*

*Store protective clothing separately.*

· **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:**

*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

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Liquid

**Color:** Clear

· **Odor:** Methanol

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

**Melting point/Melting range:** -97.8 °C (-144 °F)

**Boiling point/Boiling range:** 64 °C (147.2 °F)

· **Flash point:** 11 °C (51.8 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 455 °C (851 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

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|  |                        |
|--|------------------------|
| · <b>Explosion limits:</b>   |                        |
| <b>Lower:</b>  | 5.5 Vol %              |
| <b>Upper:</b>  | 44 Vol %               |
| · <b>Vapor pressure at 20 °C (68 °F):</b> 128 hPa (96 mm Hg)                       |                        |
| · <b>Density at 20 °C (68 °F):</b> 0.79157 g/cm <sup>3</sup> (6.60565 lbs/gal)     |                        |
| · <b>Relative density</b> Not determined.  |                        |
| · <b>Vapor density</b> Not determined.   |                        |
| · <b>Evaporation rate</b> Not determined.  |                        |
| · <b>Solubility in / Miscibility with Water:</b> Not miscible or difficult to mix. |                        |
| · <b>Partition coefficient (n-octanol/water):</b> Not determined.                  |                        |
| · <b>Viscosity:</b>  |                        |
| <b>Dynamic:</b>  | Not determined.        |
| <b>Kinematic:</b>  | Not determined.        |
| · <b>Solvent content:</b>  |                        |
| <b>Organic solvents:</b>   | 100.0 %                |
| <b>VOC content:</b>  | 99.97 %                |
|  | 791.4 g/l / 6.60 lb/gl |
| · <b>Solids content:</b> 0.0 %   |                        |
| · <b>Other information</b> 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)**

|            |          |        |
|------------|----------|--------|
| Inhalative | LC50/4 h | 3 mg/l |
|------------|----------|--------|

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

|            |          |                       |
|------------|----------|-----------------------|
| Oral       | LD50     | 5,628 mg/kg (rat)     |
| Dermal     | LD50     | 15,800 mg/kg (rabbit) |
| Inhalative | LC50/4 h | 3 mg/l (ATE)          |

- **Primary irritant effect:**
- **on the skin:** No irritant effect.

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- **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:  
 Toxic

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

|               |  |    |
|---------------|--|----|
| CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride) | 2B |
|---------------|--|----|

- **NTP (National Toxicology Program)**

|               |  |   |
|---------------|--|---|
| CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride) | R |
|---------------|--|---|

- **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.

## 14 Transport information

- |                                  |                                      |
|----------------------------------|--------------------------------------|
| · <b>UN-Number</b>               |                                      |
| · <b>DOT, IMDG, IATA</b>         | UN1993                               |
| · <b>UN proper shipping name</b> |                                      |
| · <b>DOT</b>                     | Flammable liquids, n.o.s. (Methanol) |
| · <b>IMDG, IATA</b>              | FLAMMABLE LIQUID, N.O.S. (METHANOL)  |

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· **Transport hazard class(es)**

· **DOT**



· **Class** 3 Flammable liquids  
 · **Label** 3

· **IMDG, IATA**



· **Class** 3 Flammable liquids  
 · **Label** 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, S-E  
 · **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  
 · **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. (METHANOL), 3, II

## 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):**

All ingredients are listed.

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· **TSCA (Toxic Substances Control Act):**

Methanol (Methyl Alcohol)

1,2-Dichloroethane (Ethylene Dichloride)

· **Proposition 65**

· **Chemicals known to cause cancer:**

CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride)

· **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)**

CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride)

B2

· **TLV (Threshold Limit Value established by ACGIH)**

CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride)

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

CAS: 107-06-2 | 1,2-Dichloroethane (Ethylene Dichloride)

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02

GHS06

GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Methanol (Methyl Alcohol)

· **Hazard statements**

Highly flammable liquid and vapor.

Toxic if inhaled.

Causes damage to organs.

· **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.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

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.

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*Specific treatment (see on this label).*

*In case of fire: Use for extinction: CO<sub>2</sub>, 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**

*11-20-2017: review SDS for accuracy. STN*

*Revision 0.0. 07-22-2016: creation date for SDS. STN*

*11/20/2017 / -*

· **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*

*Acute Tox. 3: Acute toxicity – Category 3*

*STOT SE 1: Specific target organ toxicity (single exposure) – Category 1*