

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/19/2021

Reviewed on 05/19/2021

## 1 Identification

- **Product identifier**
- **Trade name:** Phenolphthalein 1% Stock Solution
- **Article number:** AXI028
- **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](mailto:shermann@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.



GHS08 Health hazard

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 1B H350 May cause cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT SE 1 H370 Causes damage to the central nervous system and the visual organs.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Label elements**

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

- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**  
Methanol (Methyl Alcohol)

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*Phenolphthalein*

· **Hazard statements**

*Highly flammable liquid and vapor.*

*Harmful if swallowed.*

*Suspected of causing genetic defects.*

*May cause cancer.*

*Suspected of damaging fertility or the unborn child.*

*Causes damage to the central nervous system and the visual organs.*

· **Precautionary statements**

*Obtain special instructions before use.*

*Do not handle until all safety precautions have been read and understood.*

*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: Get medical advice/attention.*

*Specific treatment (see on this label).*

*In case of fire: Use for extinction: CO2, powder or water spray.*

*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 = \*1*

*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.

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**· Dangerous components:**

CAS: 67-56-1	Methanol (Methyl Alcohol)	98.738%
CAS: 77-09-8	Phenolphthalein	1.262%

## 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:**

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**

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:** 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
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CAS: 77-09-8	Phenolphthalein	4 mg/m <sup>3</sup>
<b>· PAC-2:</b>		
CAS: 67-56-1	Methanol (Methyl Alcohol)	2,100 ppm
CAS: 77-09-8	Phenolphthalein	44 mg/m <sup>3</sup>
<b>· PAC-3:</b>		
CAS: 67-56-1	Methanol (Methyl Alcohol)	7200* ppm
CAS: 77-09-8	Phenolphthalein	260 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
*Ensure good ventilation/exhaustion at the workplace.  
 Open and handle receptacle with care.  
 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 item 7.*
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
*The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
 At this time, the remaining constituent has no known exposure limits.*

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

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**· Ingredients with biological limit values:**

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

BEI	15 mg/L
	LD50 Intraperitoneal: urine
	Time: end of shift
	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.

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:**



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

## 9 Physical and chemical properties

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

**· General Information**

**· Appearance:**

**Form:** Fluid

**Color:** According to product specification

**· Odor:** Characteristic

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· <b>Odor threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b> <b>Melting point/Melting range:</b>	-97.8 °C (-144 °F)
<b>Boiling point/Boiling range:</b>	Undetermined.
· <b>Flash point:</b>	11 °C (51.8 °F)
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	455 °C (851 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <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>	0.7926 g/cm <sup>3</sup> (6.61425 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</b> <b>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>	98.7 %
<b>VOC content:</b>	98.74 %
	782.6 g/l / 6.53 lb/gal
<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.

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· **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	1,202-2,804 mg/kg (rat)
Inhalative	LC50/4h	130 mg/l (rat)

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

Oral	LD50	100 mg/kg (ATE)
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4h	3 mg/l (ATE)

- **Primary irritant effect:**
- **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**

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

CAS: 77-09-8	Phenolphthalein	2B
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· **NTP (National Toxicology Program)**

CAS: 77-09-8	Phenolphthalein	R
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· **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 2 (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.
- **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.

## 14 Transport information

· **UN-Number**  
· **DOT, IMDG, IATA** UN1230

· **UN proper shipping name**  
· **DOT** Methanol mixture  
· **IMDG, IATA** METHANOL mixture

· **Transport hazard class(es)**

· **DOT**



· **Class** 3 Flammable liquids  
· **Label** 3, 6.1

· **IMDG**



· **Class** 3 Flammable liquids  
· **Label** 3/6.1

· **IATA**



· **Class** 3 Flammable liquids  
· **Label** 3 (6.1)

· **Packing group**  
· **DOT, IMDG, IATA** II

· **Environmental hazards:** Not applicable.

· **Special precautions for user** Warning: Flammable liquids  
· **Hazard identification number (Kemler code):** 336

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· <b>EMS Number:</b>	F-E,S-D
· <b>Stowage Category</b>	B
· <b>Stowage Code</b>	SW2 Clear of living quarters.

· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
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· **Transport/Additional information:**

· <b>DOT</b>	
· <b>Quantity limitations</b>	On passenger aircraft/rail: 1 L On cargo aircraft only: 60 L

· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

· <b>UN "Model Regulation":</b>	UN 1230 METHANOL MIXTURE, 3 (6.1), II
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## 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.

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

Methanol (Methyl Alcohol)	ACTIVE
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Phenolphthalein	ACTIVE
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· **Hazardous Air Pollutants**

CAS: 67-56-1	Methanol (Methyl Alcohol)
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· **Proposition 65**

· **Chemicals known to cause cancer:**

CAS: 77-09-8	Phenolphthalein
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· **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)
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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

· **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    GHS08

· **Signal word** *Danger*

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

*Methanol (Methyl Alcohol)*

*Phenolphthalein*

· **Hazard statements**

*Highly flammable liquid and vapor.*

*Harmful if swallowed.*

*Suspected of causing genetic defects.*

*May cause cancer.*

*Suspected of damaging fertility or the unborn child.*

*Causes damage to the central nervous system and the visual organs.*

· **Precautionary statements**

*Obtain special instructions before use.*

*Do not handle until all safety precautions have been read and understood.*

*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: Get medical advice/attention.*

*Specific treatment (see on this label).*

*In case of fire: Use for extinction: CO2, powder or water spray.*

*Store in a well-ventilated place. Keep cool.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

*Carcinogenic hazardous material group III (dangerous).*

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- **Information about limitation of use:**  
*Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.*
- **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 05-07-2021: updated hazard information. STN*  
*Revision 2.0, 01-12-2020: Updated sections 1, 2 and 15 to meet Fanns new requirements*  
*05/19/2021 / -*
- **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*  
*PEL: Permissible Exposure Limit*  
*REL: Recommended Exposure Limit*  
*BEI: Biological Exposure Limit*  
*Flam. Liq. 2: Flammable liquids – Category 2*  
*Acute Tox. 4: Acute toxicity – Category 4*  
*Muta. 2: Germ cell mutagenicity – Category 2*  
*Carc. 1B: Carcinogenicity – Category 1B*  
*Repr. 2: Reproductive toxicity – Category 2*  
*STOT SE 1: Specific target organ toxicity (single exposure) – Category 1*

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