Printing date 12/21/2017

Reviewed on 12/21/2017

1 Identification

- · Product identifier
- Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)
- · Article number: P1997
- · 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.



GHS08 Health hazard

H341 Suspected of causing genetic defects. Muta. 2

Carc. 1B H350 May cause cancer.

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

STOT SE 2 H371 May cause damage to organs.

· Label elements

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



· Signal word Danger

· Hazard-determining components of labeling: Phenolphthalein Isopropanol Methanol (Methyl Alcohol)

· Hazard statements Highly flammable liquid and vapor. Suspected of causing genetic defects.

> (Contd. on page 2) US

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Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)

Suspected of damaging fertility or the unborn child. May cause damage to 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 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 on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. 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 = 0 Fire = 3 Reactivity = 0 HMIS-ratings (scale 0 - 4) HEALTH Health = 3 Fire = 3 Reactivity = 0 HMIS-ratings (acale 0 - 4)		(Contd. of page
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· Dangerous components:		
CAS: 64-17-5	Ethyl Alcohol, Absolute 200 Proof	88.884%
CAS: 67-56-1	Methanol (Methyl Alcohol)	4.953%
CAS: 67-63-0	Isopropanol	4.911%
CAS: 77-09-8	Phenolphthalein	1.253%

(Contd. on page 3)

US

Printing date 12/21/2017

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Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)

(Contd. of page 2)

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.

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). 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: 64-17-5 Ethyl Alcohol, Absolute 200 Proof	1,800 ppm
CAS: 67-56-1 Methanol (Methyl Alcohol)	530 ppm
CAS: 67-63-0 Isopropanol	400 ppm
CAS: 77-09-8 Phenolphthalein	4 mg/m ³
· PAC-2:	
CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof	3300* ppm
CAS: 67-56-1 Methanol (Methyl Alcohol)	2,100 ppm
CAS: 67-63-0 Isopropanol	2000* ppm
CAS: 77-09-8 Phenolphthalein	44 mg/m ³
	(Contd. on page 4)

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Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)

	(Contd. of page 3)
• PAC-3:	
CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof	15000* ppm
CAS: 67-56-1 Methanol (Methyl Alcohol)	7200* ppm
CAS: 67-63-0 Isopropanol	12000** ppm
CAS: 77-09-8 Phenolphthalein	260 mg/m ³

7 Handling and storage

· Handling:

- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- 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 item 7.

· Control parameters

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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

CAS:	e 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: 1880 mg/m³, 1000 ppm
CAS:	e 67-56-1 Methanol (Methyl Alcohol)
PEL	Long-term value: 260 mg/m ³ , 200 ppm
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI
CAS:	e 67-63-0 Isopropanol
PEL	Long-term value: 980 mg/m ³ , 400 ppm
	(Contd. on page 5)

Printing date 12/21/2017

Reviewed on 12/21/2017

Trade name:	Phenolphthalein 1% in 95%
	Alcohol (pH 8.0 Clear, pH 10.0 Pink)

	(Contd. of page 4)
REL	Short-term value: 1225 mg/m ³ , 500 ppm
	Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 984 mg/m ³ , 400 ppm
	Long-term value: 492 mg/m ³ , 200 ppm
	BEI
· Ingr	edients 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)
CAS	: 67-63-0 Isopropanol
BEI	40 mg/L
	LD50 Intraperitoneal: urine
	Time: end of shift at end of workweek
	LD50: Acetone (background, nonspecific)
· Addi	tional information: The lists that were valid during the creation were used as basis.
· Expa	osure controls
	onal protective equipment:
	eral protective and hygienic measures:
	away from foodstuffs, beverages and feed.
	h hands before breaks and at the end of work.
Store	e protective clothing separately.
	thing equipment:
In ca	use of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use iratory 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.





Tightly sealed goggles

(Contd. on page 6)

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(Contd. of page 5)

Safety Data Sheet acc. to OSHA HCS

Printing date 12/21/2017

Reviewed on 12/21/2017

Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)

· Body protection: Protective work clothing

· Information on basic physical and o	chemical properties
· General Information	-
· Appearance:	
Form:	Liquid
Color: • Odor:	Clear Alcohol
· Odor: · Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	13 °C (55.4 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	425 °C (797 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· 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 °C (68 °F):	59 hPa (44.3 mm Hg)
· Density at 20 °C (68 °F):	0.7983 g/cm ³ (6.66181 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/wat	-
· Viscosity:	in nor dolor minou.
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	98.7 %
VOC content:	98.75 % 788.3 g/l / 6.58 lb/gl
Solids content:	1.3 %

(Contd. of page 6)

Safety Data Sheet acc. to OSHA HCS

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Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)

• 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:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 23,967-55,909 mg/kg (rat)

Inhalative LC50/4 h 494 mg/l (rat)

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

 Oral
 LD50
 100 mg/kg (ATE)

 Dermal
 LD50
 300 mg/kg (ATE)

 Inhalative
 LC50/4 h
 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:

· Carcinogenic categories

,	tional Agency for Research on Cancer)	
	Ethyl Alcohol, Absolute 200 Proof	1
CAS: 67-63-0	* *	3
CAS: 77-09-8	Phenolphthalein	2B
· NTP (Nationa	l Toxicology Program)	
CAS: 77-09-8	Phenolphthalein	R
· OSHA-Ca (Od	cupational Safety & Health Administration)	
None of the in	gredients is listed.	

12 Ecological information

· Toxicity

• Aquatic toxicity: No further relevant information available.

(Contd. on page 8)

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(Contd. of page 7)

Safety Data Sheet acc. to OSHA HCS

Printing date 12/21/2017

Reviewed on 12/21/2017

Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)

- · 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.
- · 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	UN1993
	011775
UN proper shipping name DOT	Flammable liquids, n.o.s. (Ethanol, Methanol)
IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (ETHANOL, METHANOL)
Transport hazard class(es)	~ ,,,
-	
DOT	
Class	3 Flammable liquids
Label	3
IMDG, IATA	
Class	3 Flammable liquids
Label	3

Printing date 12/21/2017

Reviewed on 12/21/2017

Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)

	(Contd. of page
· Packing group	
DOT, IMDG, IATA	11
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
Danger code (Kemler):	30
Stowage Category	В
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 $(\widetilde{E}Q)$	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. (ETHANOI METHANOL), 3, II

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

	(extremely hazardous substances):	
None of the	ingredients is listed.	
 Section 313 	(Specific toxic chemical listings):	
CAS: 67-56	-1 Methanol (Methyl Alcohol)	
CAS: 67-63	-0 Isopropanol	
CAS: 77-09	-8 Phenolphthalein	
· TSCA (Tox	ic Substances Control Act):	
Ethyl Alcoh	ol, Absolute 200 Proof	
Methanol (1	Methyl Alcohol)	
Isopropano	l	
Phenolphth	alein	
· TSCA new	(21st Century Act) (Substances not listed)	
CAS: 77-09	-8 Phenolphthalein	
· Proposition	65	
· Chemicals	known to cause cancer:	
CAS: 77-09	-8 Phenolphthalein	
		(Contd. on page

Printing date 12/21/2017

Reviewed on 12/21/2017

Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)

(Contd. of page 9)

A3

A4

• Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

 \cdot Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

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

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

· Carcinogenic categories

 \cdot EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

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

CAS: 67-63-0 Isopropanol

· 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*



· Signal word Danger

· Hazard-determining components of labeling: **Phenolphthalein** Isopropanol Methanol (Methyl Alcohol) · Hazard statements Highly flammable liquid and vapor. Suspected of causing genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to 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 on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. (Contd. on page 11)

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Printing date 12/21/2017

Reviewed on 12/21/2017

Trade name: Phenolphthalein 1% in 95% Alcohol (pH 8.0 Clear, pH 10.0 Pink)

(Contd. of page 10)

IF exposed or concerned: Get medical advice/attention. 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). · 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 12-21-2017: review SDS for accuracy. STN Revision 0.0, 07-15-2016, Creation date for SDS. STN 12/21/2017 / -

· 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 Muta. 2: Germ cell mutagenicity - Category 2 Carc. 1B: Carcinogenicity - Category 1B Repr. 2: Reproductive toxicity - Category 2

STOT SE 2: Specific target organ toxicity (single exposure) – Category 2