according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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1 Identification

· Product identifier

- Trade name: Phenolphthalein Indicator Solution, 1.0% w/v in Isopropanol
- Product code: PH1801SS
- · Recommended use and restriction on use
- · Recommended use: Laboratory chemicals
- · Restrictions on use: No relevant information available.
- · Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier: AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 Phone: (717)632-1291 Toll-Free: (866)632-1291
- info@aquaphoenixsci.com
 Emergency telephone number: ChemTel Inc.
 (800)255-3924 (North America) +1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Eye Irrit. 2A H319 Causes serious eye irritation.

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 3 H336 May cause drowsiness or dizziness.

· Label elements

· GHS label elements

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



· Signal word: Danger

· Hazard statements:

H225 Highly flammable liquid and vapor.

H319 Causes serious eve irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H336 May cause drowsiness or dizziness.

· Precautionary statements:

P201 Obtain special instructions before use.

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	(Cont'd. of pag
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing mist, vapors, or spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin v water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lense present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use for extinction: Alcohol resistant foam or water spray.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/internation regulations.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Compone	nts:		
67-63-0	Propan-2-ol	🚸 Flam. Liq. 2, H225	43.5%
		 Flam. Liq. 2, H225 Eye Irrit. 2A, H319; STOT SE 3, H336 	
77-09-8	phenolphthalein	🚸 Muta. 2, H341; Carc. 1B, H350; Repr. 2, H361	1.1%
7732-18-5	Water		55.4%
A al al it i a mai	information.	•	

· Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

Description of first aid measures

- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

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Trade name: Phenolphthalein Indicator Solution, 1.0% w/v in Isopropanol (Cont'd. of page 2) Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. · After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help. Most important symptoms and effects, both acute and delayed: Causes serious eye irritation. Breathing difficulty Coughing Causes mild skin irritation. Gastric or intestinal disorders when ingested. Nausea in case of ingestion. Dizziness Acidosis Disorientation Unconsciousness · Danger: May cause drowsiness or dizziness. Danger of impaired breathing. Suspected of causing genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. - Indication of any immediate medical attention and special treatment needed: If medical advice is needed, have product container or label at hand. 5 Fire-fighting measures · Extinguishing media Suitable extinguishing agents: Alcohol resistant foam Water fog / haze Carbon dioxide Gaseous extinguishing agents Fire-extinguishing powder

- For safety reasons unsuitable extinguishing agents: Water stream.
- Special hazards arising from the substance or mixture Highly flammable liquid and vapor. Formation of toxic gases is possible during heating or in case of fire.
- · Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device. Wear fully protective suit.
- Additional information:
- Eliminate all ignition sources if safe to do so. Use large quantities of foam as it is partially destroyed by the product. Cool endangered receptacles with water in flooding quantities.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

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(Cont'd. of page 3)

Wear protective equipment. Keep unprotected persons away. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. • Environmental precautions

Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

• Methods and material for containment and cleaning up Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable receptacles.

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.

7 Handling and storage

· Handling

• Precautions for safe handling: Prevent formation of aerosols. Avoid splashes or spray in enclosed areas. Use only in well ventilated areas. • Information about protection against explosions and fires: Highly flammable liquid and vapor.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Flammable gas-air mixtures may be formed in empty containers/receptacles.

· Conditions for safe storage, including any incompatibilities

• **Requirements to be met by storerooms and receptacles:** Store in a cool location.

Due to photo-sensitivity, store product in brown-glass or stainless steel receptacles.

- Information about storage in one common storage facility: Store away from foodstuffs.
- Store away from oxidizing agents.
- Further information about storage conditions: Keep containers tightly sealed.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters

· Components	with limit values that require monitoring at the workplace:
67-63-0 Prop	an-2-ol
PEL (USA)	Long-term value: 980 mg/m ³ , 400 ppm
REL (USA)	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
L	(Cont'd, on page 5)

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Trade name: Phe	nolphthalein Indicator Solution, 1.0% w/v in Isopropanol	
		(Cont'd. of page 4)
TLV (USA)	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm BEI	
EL (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm	
EV (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm	
LMPE (Mexico)	Short-term value: 400 ppm Long-term value: 200 ppm A4, IBE	
· Ingredients wit	th biological limit values:	
67-63-0 Propar		
BEI (USA) 40 n		
	dium: urine e: end of shift at end of workweek	
	ameter: Acetone (background, nonspecific)	
The usual preca Keep away from Immediately ren Wash hands be Do not inhale du • Engineering co • Breathing equi Not required un Use suitable res NIOSH or EN a • Protection of h	ctive and hygienic measures: autionary measures for handling chemicals should be followed. In foodstuffs, beverages and feed. move all soiled and contaminated clothing. efore breaks and at the end of work. ust / smoke / mist. controls: Provide adequate ventilation. ipment: der normal conditions of use. spiratory protective device when high concentrations are present. pproved organic vapor respirator equipped with a dust/mist prefilter should	be used.
 Material of glov Laminated film (Nitrile rubber, N Neoprene glove Butyl rubber, BF Not suitable ar PVC gloves PVA gloves Eye protection 	gloves. IBR ୧୨ ୧ ୧ gloves made of the following materials:	preparation.
	national guidelines concerning the use of protective eyewear. on: Solvent resistant protective clothing	(Cont'd. on page 6)

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Trade name: Phenolphthalein Indicator Solution, 1.0% w/v in Isopropanol

· Limitation and supervision of exposure into the environment

No relevant information available.

9 Physical and chemical properties	
· Information on basic physical a	nd chemical properties
· Appearance:	
Form:	Liquid
Color:	Clear, colorless
· Odor:	Like alcohol
· Odor threshold:	Not determined.
· pH-value:	Not determined.
 Melting point/Melting range: 	Not determined.
 Boiling point/Boiling range: 	>78 °C (>172.4 °F)
· Flash point:	<23 °C (<73.4 °F)
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	>260 °C (>500 °F)
· Decomposition temperature:	Not determined.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
· Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
 Oxidizing properties: 	Not determined.
· Vapor pressure at 20 °C (68 °F):	59 hPa (44.3 mm Hg)
· Density at 20 °C (68 °F):	0.9-0.92 g/cm ³ (7.51-7.68 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/wate	er): Not determined.
· Viscosity	
Dynamic:	Not determined.
Kinematic:	Not determined.
 Other information 	No relevant information available.

10 Stability and reactivity

· Reactivity: No relevant information available.

• Chemical stability: Stable under normal temperatures and pressures.

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ade name: Phenolphthalein Indi	cator Solution, 1.0% w/v in Isopropanol
Used empty containers may conta Can form explosive mixtures in ai	red according to specifications. ctions ents. r. eated above the decomposition point. ain product gases which form explosive mixtures with air. r if heated above flash point and/or when sprayed or atomized. tion sources away - Do not smoke. zing agents. roducts
Toxicological information	
 LD/LC50 values that are relevant of the second structure On the skin: Causes mild skin irr On the eye: Causes eye irritation 	le data, the classification criteria are not met. ht for classification: None. itation.
· IARC (International Agency for	Research on Cancer):
67-63-0 Propan-2-ol	3
77-09-8 phenolphthalein	2
· NTP (National Toxicology Prog	ram):
77-09-8 phenolphthalein	
· OSHA-Ca (Occupational Safety	& Health Administration):
None of the ingredients are listed.	
 Probable route(s) of exposure: Ingestion. Inhalation. Eye contact. Skin contact. Acute effects (acute toxicity, irr Irritating to eyes. Causes mild skin irritation. Vapors have narcotic effect. 	itation and corrosivity): of very serious irreversible effects. eted of causing genetic defects.

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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Trade name: Phenolphthalein Indicator Solution, 1.0% w/v in Isopropanol

(Cont'd. of page 7)

12 Ecological information

- · Toxicity
- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.
- · Additional ecological information
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Other adverse effects No 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. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- · Uncleaned packagings
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

4 Transport information	
· UN-Number	
· DOT, ADR/RID/ADN, IMDG, IATA	UN1219
· UN proper shipping name	
·DOT	Isopropanol Solution
· ADR/RID/ADN, IMDG, IATA	ISOPROPANOL (ISOPROPYL ALCOHOL) SOLUTION
· Transport hazard class(es)	
· DOT	
· Class	3
· Label	3
	(Cont'd. on page

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	ion, 1.0% w/v in Isopropanol
	(Cont'd. of pag
· ADR/RID/ADN	
A	
· Class · Label	3 (F1) 3
· IMDG, IATA	
· Class	3
· Label	3
· Packing group	
· DOT, ADR/RID/ADN, IMDG, IATA	II
· Environmental hazards	Not applicable.
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
• Transport in bulk according to Annex	
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· Transport/Additional information:	
•	On passenger aircraft/rail: 5 L
· DOT	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· DOT	
• DOT • Quantity limitations	
DOT Quantity limitations 5 Regulatory information	On cargo aircraft only: 60 L
• DOT • Quantity limitations 5 Regulatory information • Safety, health and environmental reg	
DOT Quantity limitations 5 Regulatory information Safety, health and environmental reg mixture	On cargo aircraft only: 60 L
• DOT • Quantity limitations 5 Regulatory information • Safety, health and environmental reg	On cargo aircraft only: 60 L
 DOT Quantity limitations 5 Regulatory information Safety, health and environmental regmixture United States (USA) 	On cargo aircraft only: 60 L
DOT Quantity limitations Generation Safety, health and environmental reg mixture United States (USA) SARA	On cargo aircraft only: 60 L
 DOT Quantity limitations 5 Regulatory information Safety, health and environmental regimixture United States (USA) SARA Section 302 (extremely hazardous substantion) 	On cargo aircraft only: 60 L gulations/legislation specific for the substance
 DOT Quantity limitations 5 Regulatory information Safety, health and environmental regulatory United States (USA) SARA Section 302 (extremely hazardous substant None of the ingredients are listed. 	On cargo aircraft only: 60 L gulations/legislation specific for the substance
 DOT Quantity limitations 5 Regulatory information Safety, health and environmental regmixture United States (USA) SARA Section 302 (extremely hazardous substant None of the ingredients are listed. Section 355 (extremely hazardous substant None None None None None None None None	On cargo aircraft only: 60 L gulations/legislation specific for the substance nces):
 DOT Quantity limitations 5 Regulatory information Safety, health and environmental regulatory Safety, health and environmental regulatory United States (USA) SARA Section 302 (extremely hazardous substant None of the ingredients are listed. Section 355 (extremely hazardous substant None of the ingredients are listed. 	On cargo aircraft only: 60 L gulations/legislation specific for the substance nces):
 DOT Quantity limitations 5 Regulatory information 5 Regulatory information 5 Safety, health and environmental regmixture United States (USA) SARA Section 302 (extremely hazardous substant None of the ingredients are listed. Section 355 (extremely hazardous substant None of the ingredients are listed. Section 313 (Specific toxic chemical listing) 	On cargo aircraft only: 60 L gulations/legislation specific for the substance nces):

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	(Cont'd. of pa
Α	Il ingredients are listed or exempt.
P	roposition 65 (California)
C	hemicals known to cause cancer:
7	7-09-8 phenolphthalein
С	hemicals known to cause developmental toxicity for females:
Ν	lone of the ingredients are listed.
С	hemicals known to cause developmental toxicity for males:
Ν	lone of the ingredients are listed.
С	hemicals known to cause developmental toxicity:
Ν	lone of the ingredients are listed.
E	PA (Environmental Protection Agency):
Ν	lone of the ingredients are listed.
l	ARC (International Agency for Research on Cancer):
	7-63-0 Propan-2-ol
7	7-09-8 phenolphthalein
C	anadian Domestic Substances List (DSL):
Α	II ingredients listed on DSL or NDSL.
(Other information
	his information is based on our present knowledge. However, this shall not constitute a guarantee fo pecific product features and shall not establish a legally valid contractual relationship.

IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent OSHA: Occupational Safety & Health Administration Flam. Liq. 2: Flammable liquids - Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A Muta. 2: Germ cell mutagenicity - Category 2 Carc. 1B: Carcinogenicity – Category 1B Repr. 2: Reproductive toxicity - Category 2 STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by:

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ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com