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

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1 Identification

- Product identifier
- · Trade name: Phenol Red Indicator Solution, 0.04% w/v
- · Product code: PH2510SS
- 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 USA

Tel +1 (717)632-1291

Toll-Free: (866)632-1291

info@aquaphoenixsci.com

Distributor:

AguaPhoenix Scientific

860 Gitts Run Road,

Hanover, PA 17331

(717) 632-1291

· 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

Skin Irrit, 2 H315 Causes skin irritation.

Eye Irrit, 2A H319 Causes serious eye irritation,

- · Label elements
- GHS label elements

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

· Hazard pictograms:



GHS07

- · Signal word: Warning
- · Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

P264

Wash thoroughly after handling.

P280 P302+P352 Wear protective gloves and eye protection.

P302+P352 If on skin: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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P332+P313

If skin irritation occurs: Get medical advice/attention.

P362+P364

Take off contaminated clothing and wash it before reuse.

P337+P313

If eye irritation persists: Get medical advice/attention.

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

| - Components: | | |
|---------------|--|------|
| 7732-18-5 | Water | >89% |
| 143-74-8 | phenol red | <10% |
| 1310-73-2 | Sodium hydroxide | <1% |
| | Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318 | |

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: No special measures required.
- · After inhalation: Supply fresh air: consult doctor in case of complaints.
- · After skin contact:

Immediately rinse with water.

If skin irritation continues, consult a doctor.

After eve contact:

Protect unharmed eye.

Remove contact lenses if worn.

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:

Nausea in case of ingestion.

May cause gastro-intestinal irritation if ingested.

· Danger: Causes skin and eye irritation.

· 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: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

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Advice for firefighters

· Protective equipment;

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions

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

Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Place in properly marked container for disposal.

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 outdoors or in a well-ventilated area.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

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

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

Information about storage in one common storage facility:

Store away from metals.

Do not store together with oxidizing and acidic materials.

Store away from foodstuffs.

· Further information about storage conditions:

Keep containers tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

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

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Exposure controls
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Engineering controls: Provide adequate ventilation.
- · Breathing equipment: For large spills, respiratory protection may be advisable.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves

Neoprene gloves

Natural rubber, NR

Nitrile rubber, NBR

Laminated film gloves.

· 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:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- · Body protection: Protective work clothing
- Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures No special requirements.

9 Physical and chemical properties

- Information on basic physical and chemical properties
- Appearance:

Form:

Liquid

Color:

Red

· Odor:

Odorless

Odor threshold:

Not determined.

pH-value:
Melting point/Melting range:

Not determined. 0 °C (32 °F)

· Boiling point/Boiling range:

100-102 °C (212-151.6 °F)

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| | | (Cont'd, of pag |
|--------------------------------------|---|-----------------|
| Flash point: | The product is not flammable. | |
| Flammability (solid, gaseous): | Not applicable. | |
| Auto-ignition temperature: | Not determined. | |
| Decomposition temperature: | Not determined. | |
| Danger of explosion: | Product does not present an explosion hazard. | |
| Explosion limits | | |
| Lower: | Not determined. | |
| Upper: | Not determined. | |
| Oxidizing properties: | Not determined. | |
| Vapor pressure at 20 °C (68 °F): | 23 hPa (17.3 mm Hg) | |
| Density: | | |
| Relative density: | Not determined. | |
| Vapor density: | Not determined. | |
| Evaporation rate: | Not determined. | |
| Solubility in / Miscibility with | | |
| Water: | Fully miscible. | |
| Partition coefficient (n-octanol/wat | er): Not determined. | |
| Viscosity | | |
| Dynamic: | Not determined. | |
| Kînematic: | 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.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point.

Reacts with certain metals.

Exothermic reaction with acids.

- · Conditions to avoid Excessive heat.
- Incompatible materials

Metals.

Strong acids

· Hazardous decomposition products

Under fire conditions only:

Possible in traces.

11 Toxicological information

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- Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- · On the skin: Causes mild skin irritation.
- · On the eye: Causes eye irritation.
- · Sensitization: Based on available data, the classification criteria are not met.
- IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eve contact.

Skin contact.

- Acute effects (acute toxicity, irritation and corrosivity): No relevant information available.
- Repeated dose toxicity: No relevant information available.
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

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: Generally not hazardous for water.
- 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 (Contd. on page 7)

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disposal for hazardous and nonhazardous wastes.

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Uncleaned packagings

Recommendation: Disposal must be made according to official regulations.

| - |
|---|

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- SARA
- Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

34487-61-1 sodium hydrogen 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bisphenolate S,S-dioxide

7732-18-5 Water

· Proposition 65 (California)

· Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

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· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

None of the ingredients are listed.

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.

Abbreviations and acronyms:

ADR: 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

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

Met. Corr.1: Corrosive to metals - Category 1

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

Skin Imit. 2: Skin corrosion/irritation - Category 2

Eye Dam, 1: Serious eye damage/eye irritation - Category 1

Eye Imit. 2A: Serious eye damage/eye irritation - Category 2A

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:

ChemTel

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtel.com