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

Revision: June 04, 2019

1 Identification Product identifier · Trade name: Hardness Indicator Liquid · Product code: AR-1077-60 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 **Distributor:** Aqua Analytics 245 Matheson Blvd East, Units 1 & 2 Mississauga, Ontario Canada L4Z 3C9 (888) 712-4000 · 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

The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

- [·] Label elements
- · GHS label elements Not regulated.
- · Hazard pictograms: None.
- · Signal word: None
- · Hazard statements: None.
- · Precautionary statements: None.

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

3 Composition/information on ingredients

[•] Chemical characterization: Substances

· Components:

7732-18	5 Water
3147-14	6 3-hydroxy-4-(6-hydroxy-m-tolylazo)naphthalene-1-sulphonic acid

· 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.

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>90% <10%

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4 First-aid measures

[•] Description of first aid measures

• After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

• After eye contact:

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:
- Gastric or intestinal disorders when ingested.
- Indication of any immediate medical attention and special treatment needed:

No relevant information available.

5 Fire-fighting measures

[·] Extinguishing media

• Suitable extinguishing agents:

The product is not flammable.

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.

- 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.

For large spills, wear protective clothing.

• 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). Dispose of the collected material according to regulations.

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.

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7 Handling and storage

[·] Handling

· Precautions for safe handling:

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

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 in cool, dry conditions in well sealed receptacles.
- Information about storage in one common storage facility: Store away from oxidizing agents.
- 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:

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.

• Engineering controls: Provide adequate ventilation.

- · Breathing equipment: Not required under normal conditions of use.
- Protection of hands:

Gloves not required under normal conditions of use.

Gloves are advised for repeated or prolonged contact.

Wear protective gloves to handle contents of damaged or leaking units.

• Eye protection: 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.

Information on basic physical	and chemical properties	
· Appearance:		
Form:	Liquid	
Color:	Light purple.	
· Odor:	Not determined.	
Odor threshold:	Not determined.	
· pH-value:	Not determined.	
Melting point/Melting range:	0 °C (32 °F)	
Boiling point/Boiling range:	100 °C (212 °F)	

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

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ade name: Hardness Indicator Liqu	uid	
		(Cont'd. of page
· 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: Upper: Oxidizing properties: 	Not determined. Not determined. Not determined.	
Vapor pressure:	Not determined.	
Density: Relative density: Vapor density: Evaporation rate:	Not determined. Not determined. Not determined.	
Solubility in / Miscibility with Water:	Soluble.	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
 Viscosity Dynamic: Kinematic: Other information 	Not determined. Not determined. 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 Reacts with strong alkali.

Reacts with strong oxidizing agents.

- · Conditions to avoid No relevant information available.
- · Incompatible materials No relevant information available.
- · Hazardous decomposition products
- Under fire conditions only:
- Possible in traces.

11 Toxicological information

[·] Information on toxicological effects · Acute toxicity:

(Cont'd. on page 5)

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

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LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. 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. Eye 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.		(Cont'd. of pag
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 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-single exposure: 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 disposal for hazardous and nonhazardous wastes.

[·] Uncleaned packagings

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

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Trade name: Hardness Indicator Liquid

• Recommendation: Disposal must be made according to official regulations.

Transport information		
· UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
[·] UN proper shipping name · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
Transport hazard class(es)		
· DOT, ADR/RID/ADN, IMDG, IATA · Class	Not regulated.	
Packing group DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
Environmental hazards	Not applicable.	
Special precautions for user	Not applicable.	
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	x II of Not applicable.	

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 355 (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)

3147-14-6 3-hydroxy-4-(6-hydroxy-m-tolylazo)naphthalene-1-sulphonic acid

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

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Trade	name:	Hardness	Indicator	Liquid
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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 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 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