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

1 Identification

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Product identifier · Trade name: Sodium Hydroxide, 0.1N · Product code: HBSH6200-T 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:** Heatbath Corporation 107 Front St. Indian Orchard, MA 01151 413-452-2000 · 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 Wear protective gloves / eye protection / face 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. (Cont'd. on page 2)

99.6%

0.4%

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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

1310-73-2 Sodium hydroxide

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: If skin irritation continues, consult a doctor.

· After eye 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:

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

• **Danger:** Causes skin and eye irritation.

Indication of any immediate medical attention and special treatment needed:

Medical supervision for at least 48 hours.

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.

[·] Advice for firefighters

· Protective equipment:

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Wear self-contained respiratory protective device. Wear fully protective suit.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

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 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:

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

Unsuitable material for receptacle: glass or ceramic.

Store only in the original receptacle.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with acids.

Store away from oxidizing agents.

Store away from metals.

• 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:

(Cont'd. on page 4)

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	(Cont'd. of page 3)
1310-73-2 Sodi	
PEL (USA)	Long-term value: 2 mg/m ³
REL (USA)	Ceiling limit value: 2 mg/m ³
TLV (USA)	Ceiling limit value: 2 mg/m ³
EL (Canada)	Ceiling limit value: 2 mg/m ³
EV (Canada)	Ceiling limit value: 2 mg/m ³
LMPE (Mexico)	Ceiling limit value: 2 mg/m ³
The usual preca Keep away from Immediately rer Wash hands be Avoid contact w Engineering co Breathing equi Protection of h Protection of h Protection The glove mate Eye protection Safety Follow relevant Body protection	ctive and hygienic measures: autionary measures for handling chemicals should be followed. In foodstuffs, beverages and feed. move all soiled and contaminated clothing. effore breaks and at the end of work. with the eyes and skin. controls: Provide adequate ventilation. ipment: For spills, respiratory protection may be advisable. hands: tive gloves

Information on basic physical and chemical properties			
Appearance: Form:	Liquid		
Color:	Colorless		
Odor:	Odorless		
Odor threshold:	Not determined.		
pH-value:	13		
Melting point/Melting range:	Not determined.		
Boiling point/Boiling range:	110-120 °C (230-248 °F)		
Flash point:	The product is not flammable.		
Flammability (solid, gaseous):	Not applicable.		

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		(Cont'd. of page
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:	Not determined.	
Density:		
Relative density:	1.0-1.2	
Vapor density:	Not determined.	
Evaporation rate:	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wa	iter): 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.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

[•] Possibility of hazardous reactions

Strong exothermic reaction with acids.

Attacks materials containing glass and silicate.

Reacts with various metals.

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

• Conditions to avoid Excessive heat.

[·] Incompatible materials

Metals.

Strong acids

- Hazardous decomposition products
- Under fire conditions only:

Toxic metal oxide smoke

11 Toxicological information

[·] Information on toxicological effects

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	(Cont'd. of pa
Acute toxicity:	(
LD/LC50 values that are relevant for classification: None.	
Primary irritant effect:	
On the skin: Irritant to skin and mucous membranes.	
On the eye: Causes serious 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.	
Eye contact. Skin contact.	
Acute effects (acute toxicity, irritation and corrosivity): Irritating to eyes and skin.	
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 me	et.
Aspiration hazard: Based on available data, the classification criteria are not met.	

- [·] 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.
- Ecotoxical effects:
- **Remark:** After neutralization a reduction of the harming action may be recognized
- [•] Additional ecological information
- · General notes:

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

Other adverse effects No relevant information available.

13 Disposal considerations

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	(Cont'd. of page
The user of this material has the response	usehold garbage. Do not allow product to reach sewage system. sibility to dispose of unused material, residues and containers and federal laws and regulations regarding treatment, storage an s wastes.
 Uncleaned packagings Recommendation: Disposal must be ma Recommended cleansing agent: Water 	
4 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 • Marine pollutant:	No
[·] Special precautions for user	Not applicable.
 Transport in bulk according to Ann MARPOL73/78 and the IBC Code 	ex 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 315 (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) (Cont'd. on page 8)

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1310-73-2 Sodium hydroxide

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.

· 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): (Substances not listed.)

All 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 Irrit. 2: Skin corrosion/irritation – Category 2 Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Eye Irrit. 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 Inc.

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