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

Revision: January 28, 2021

1 Identification	
· Product ident	ifier
· Trade name: <u>So</u> · Product code: [D ugan Hydroxide, 0.2N DUSH6202-G
Recommended	use and restriction on use use: Laboratory chemicals use: No relevant information available.
Details of the Manufacturer/S AquaPhoenix Sc 860 Gitts Run Rc Hanover, PA 173 Tel +1 (717)632- Toll-Free: (866)6 info@aquaphoer Distributor: Dubois Chemica 3630 East Kemp Cincinnati, OH (800) 438-2647	sientific, Inc. bad 331 USA -1291 332-1291 nixsci.com Is Inc. per Rd,
 Emergency tele ChemTel Inc. (800)255-3924 (+1 (813)248-058 	
	· · ·
2 Hazard(s) ide	
Classification	entification of the substance or mixture
Classification Skin Irrit. 2 H3 ⁻	entification of the substance or mixture 15 Causes skin irritation.
Classification Skin Irrit. 2 H3 Eye Irrit. 2A H3	entification of the substance or mixture 15 Causes skin irritation. 19 Causes serious eye irritation.
 Classification Skin Irrit. 2 H3⁻⁷ Eye Irrit. 2A H3⁻⁷ Label element GHS label elem 	entification of the substance or mixture 15 Causes skin irritation. 19 Causes serious eye irritation. 18 ents assified and labeled according to the Globally Harmonized System (GHS).
Classification Skin Irrit. 2 H3 ⁻⁷ Eye Irrit. 2A H3 ⁻⁷ Label element GHS label elem The product is cl	entification of the substance or mixture 15 Causes skin irritation. 19 Causes serious eye irritation. 18 ents assified and labeled according to the Globally Harmonized System (GHS).
 Classification Skin Irrit. 2 H3⁻⁷ Eye Irrit. 2A H3⁻⁷ Label element GHS label elem The product is cl Hazard pictogra Hazard pictogra GHS07 Signal word: W Hazard stateme H315 Causes sk 	entification of the substance or mixture 15 Causes skin irritation. 19 Causes serious eye irritation. 10 Causes serious eye irritation. 10 Causes serious eye irritation.

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

Revision: January 28, 2021

Trade name: Sodium Hydroxide, 0.2N

(Cont'd. of page 1)

P305+P351+P33	8 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
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: Substances

· Components:

 7732-18-5
 Water
 99.20%

 1310-73-2
 Sodium hydroxide
 0.80%

 ♦ Met. Corr. 1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318
 0.80%

· 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

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

· After skin contact: Immediately rinse with water.

• 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:

Irritating to eyes and skin.

Nausea in case of ingestion.

Gastric or intestinal disorders when ingested.

· **Danger:** No relevant information available.

· 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:

The product is not flammable.

Use fire fighting measures that suit the environment.

- · For safety reasons unsuitable extinguishing agents: None.
- Special hazards arising from the substance or mixture

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

(Cont'd. on page 3)

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

Revision: January 28, 2021

Trade name: Sodium Hydroxide, 0.2N

(Cont'd. of page 2)

[•] 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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Particular danger of slipping on leaked/spilled product.

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.

Inform respective authorities in case of seepage into 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). 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: No special measures required.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Use only receptacles specifically permitted for this substance/product.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

Unsuitable material for receptacle: glass or ceramic.

· 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:

Store in cool, dry conditions in well sealed receptacles. Keep containers tightly sealed.

Specific end use(s) No relevant information available.

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

Revision: January 28, 2021

Trade name: Sodium Hydroxide, 0.2N

(Cont'd. of page 3)

8 Exposure co	ontrols/personal protection
	/ith limit values that require monitoring at the workplace: constituent is the only constituent of the product which has a PEL, TLV or othe
1310-73-2 Sodi	um hydroxide
PEL (USA)	Long-term value: 2 mg/m ³
REL (USA)	Ceiling limit value: 2 mg/m³
TLV (USA)	Ceiling limit value: 2 mg/m³
EL (Canada)	Ceiling limit value: 2 mg/m³
EV (Canada)	Ceiling limit value: 2 mg/m ³
LMPE (Mexico)	Ceiling limit value: 2 mg/m³
· Exposure cor	ntrols
Keep away from Immediately ren Wash hands be Do not inhale ga Avoid contact w Engineering co Breathing equi Not required und Use suitable res For spills, respir Protection of h	der normal conditions of use. spiratory protective device when aerosol or mist is formed. atory protection may be advisable.
Material of glov Nitrile rubber, N Neoprene glove Butyl rubber, BF Natural rubber,	BR s R NR by the components in the glove materials is possible.
Safety	glasses
• Limitation an No relevant info	n: Alkaline resistant protective clothing d supervision of exposure into the environment rmation available. ment measures No relevant information available.

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

Revision: January 28, 2021

Trade name: Sodium Hydroxide, 0.2N

(Cont'd. of page 4)

9 Physical and chemical properties		
Information on basic physical a	and chemical properties	
· Appearance:		
Form:	Liquid	
Color:	Colorless	
· Odor:	Odorless	
· Odor threshold:	Not determined.	
· pH-value at 20 °C (68 °F):	>12	
Melting point/Melting range:	Not determined.	
 Boiling point/Boiling range: 	Not determined.	
· Flash point:	Not applicable.	
· 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:	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	ter): 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
- Exothermic reaction with acids.

Corrosive action on metals.

(Cont'd. on page 6)

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

Revision: January 28, 2021

Trade name: S	odium H	ydroxide.	0.2N
---------------	---------	-----------	------

(Cont'd. of page 5)

Attacks materials containing glass and silicate.

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

· Conditions to avoid No relevant information available.

· Incompatible materials Acids.

· Hazardous decomposition products Possible in traces.

11 Toxicological information

Information on toxicological effects

· Acute toxicity: Based on available data, the classification criteria are not met.

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 eye irritation.

· Sensitization: No sensitizing effects known.

· 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):

Causes serious eye irritation.

Irritating to 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 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.
- Ecotoxical effects:

• **Remark:** After neutralization a reduction of the harming action may be recognized

(Cont'd. on page 7)

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

Revision: January 28, 2021

Trade name: Sodium Hydroxide, 0.2N

(Cont'd. of page 6)

[•] 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

[•] Waste treatment methods

· Recommendation:

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

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

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

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:	Νο	
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

(Cont'd. on page 8)

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

Revision: January 28, 2021

	(Cont'd. of page
. 🤇	Safety, health and environmental regulations/legislation specific for the substance of
	nixture
	Jnited 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.
• 1	TSCA (Toxic Substances Control Act)
	All ingredients are listed or exempt.
·F	Proposition 65 (California)
	Chemicals known to cause cancer:
1	None of the ingredients are listed.
• (Chemicals known to cause developmental toxicity for females:
1	None of the ingredients are listed.
• (Chemicals known to cause developmental toxicity for males:
١	None of the ingredients are listed.
• (Chemicals known to cause developmental toxicity:
١	None of the ingredients are listed.
· E	EPA (Environmental Protection Agency):
١	None of the ingredients are listed.
	ARC (International Agency for Research on Cancer):
1	None of the ingredients are listed.
• (Canadian Domestic Substances List (DSL):
١	None of the ingredients are listed.
	Other information

· 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)

(Cont'd. on page 9)

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

Revision: January 28, 2021

Trade name: Sodium Hydroxide, 0.2N

(Cont'd. of page 8)

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