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

Printing date: September 10, 2018

Revision: September 10, 2018

Product i	lentifier
	e: <u>Sodium Thiosulfate, 0.1N</u> de: ST2910SS
· Recomme	ded use and restriction on use ded use: Laboratory chemicals s on use: No relevant information available.
• Manufactu AquaPhoer 860 Gitts R Hanover, P Phone: (71 Toll-Free: (A 17331
ChemTel Ir (800)255-3	telephone number: c. 24 (North America) -0585 (International)
2 Hazard(s	identification
	tion of the substance or mixture is not classified as hazardous according to the Globally Harmonized System (GHS).
GHS label	is not classified as hazardous according to OSHA GHS regulations within the United State elements This product does not have a classification according to the GHS regulation. Hograms: 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: Mixtures

· Components:				
7732-18-5	Water		>80%	
10102-17-7	thiosulfuric acid, disodium salt, pentahydrate		<10%	
1303-96-4	Disodium tetraborate, decahydrate	 Repr. 1B, H360 Eye Irrit. 2A, H319 	<0.1%	

• 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.

(Cont'd. on page 2)

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

Printing date: September 10, 2018

Revision: September 10, 2018

Trade name: Sodium Thiosulfate, 0.1N

(Cont'd. of page 1)

4 First-aid measures

[.] Description of first aid measures

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

• After skin contact:

Wash with soap and 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. Seek medical attention.

Most important symptoms and effects, both acute and delayed:

Gastric or intestinal disorders when ingested.

- Nausea in case of ingestion.
- 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 to enter sewers/ surface or ground water.

• 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.

Clean the affected area carefully; suitable cleaners are:

Warm water

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Cont'd. on page 3)

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

Printing date: September 10, 2018

Revision: September 10, 2018

Trade name: Sodium Thiosulfate, 0.1N

(Cont'd. of page 2)

See Section 13 for disposal information.

7 Handling and storage

[·] Handling

· Precautions for safe handling:

Prevent formation of aerosols.

Use only in well ventilated areas.

Avoid splashes or spray in enclosed 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 foodstuffs.

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.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid close or long term contact with the skin.

Avoid breathing mist, vapors, or spray.

· Engineering controls: No relevant information available.

Breathing equipment:

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

For large spills, respiratory protection may be advisable.

Protection of hands:



Protective gloves

• Eye protection:

(Cont'd. on page 4)

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

Printing date: September 10, 2018

Revision: September 10, 2018

Trade name: Sodium Thiosulfate, 0.1N

(Cont'd. of page 3)

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Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

Body protection:

Not required under normal conditions of use.

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 a 	nd chemical properties	
Appearance:		
Form:	Liquid	
Color:	Clear, colorless	
· Odor:	Nearly odorless	
· Odor threshold:	Not determined.	
· pH-value:	Not determined.	
Melting point/Melting range:	Not determined.	
Boiling point/Boiling range:	>100 °C (>212 °F)	
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:	Not determined.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
		(Cont'd. on page

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

Printing date: September 10, 2018

Revision: September 10, 2018

Trade name: Sodium Thiosulfate, 0.1N

(Cont'd. of page 4)

· 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.

To avoid thermal decomposition, do not overheat.

Possibility of hazardous reactions

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

Reacts with strong alkali.

Reacts with strong oxidizing agents.

Conditions to avoid Excessive heat.

[·] Incompatible materials

Oxidizing agents

Strong acids

Hazardous decomposition products

Under fire conditions only:

Sulfur oxides (SOx)

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: Based on available data, the classification criteria are not met.
- · On the eye: 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.

• Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

 \cdot 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.

(Cont'd. on page 6)

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

Printing date: September 10, 2018

Trade name: Sodium Thiosulfate, 0.1N

(Cont'd. of page 5)

• **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:

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

- [•] Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Smaller quantities can be disposed of with household waste.

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.

UN-Number		
DOT, ADR, IMDG, IATA	Not regulated.	
UN proper shipping name		
DOT, ADR, IMDG, IATA	Not regulated.	
Transport hazard class(es)		
DOT, ADR, IMDG, IATA		
Class	Not regulated.	
Packing group		
DOT, ADR, IMDG, IATA	Not regulated.	
Environmental hazards		

(Cont'd. of page 6)

Safety Data Sheet

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

No

Printing date: September 10, 2018

Revision: September 10, 2018

Trade name: Sodium Thiosulfate, 0.1N

· Marine pollutant:

[·] Special precautions for user

Not applicable.

Not applicable.

[•] Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

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)

All ingredients are listed.

· 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.

(Cont'd. on page 8)

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

Printing date: September 10, 2018

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Trade name: Sodium Thiosulfate, 0.1N

(Cont'd. of page 7)

 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 PBT: Persistant, Bio-accumulable, Toxic vPvB: very Persistent and very Bioaccumulative OSHA: Occupational Safety & Health Administration Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A Repr. 1B: Reproductive toxicity – Category 1B · 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