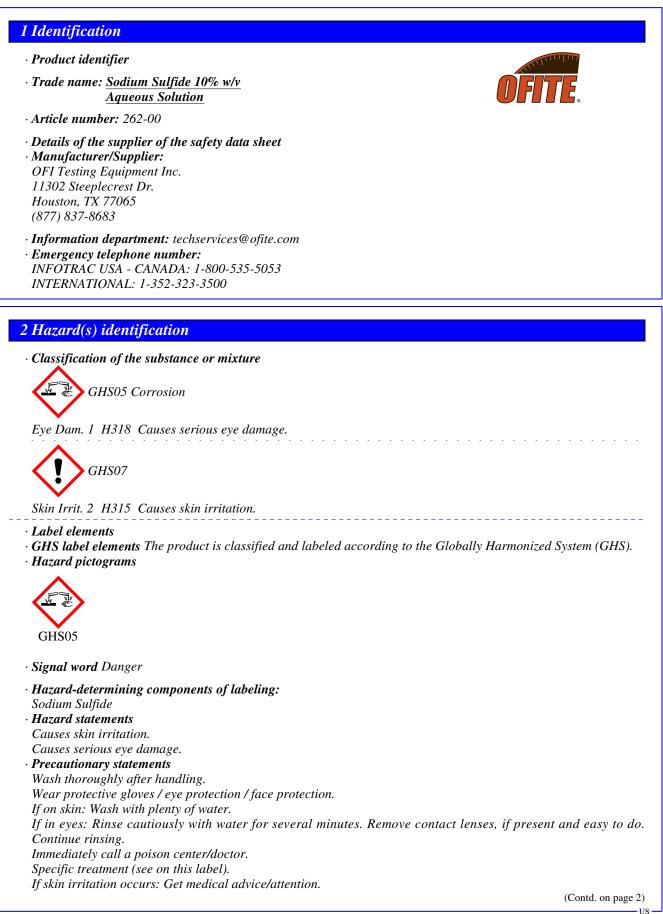
Printing date 01/12/2018

Reviewed on 01/12/2018



Printing date 01/12/2018

Reviewed on 01/12/2018

Trade name: Sodium Sulfide 10% w/v **Aqueous Solution**

(Contd. of page 1)

9.708%

90.292%

Take off contaminated clothing and wash it before reuse.

· Classification system: · NFPA ratings (scale 0 - 4)

Health = 2Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH ² Health = 2 FIRE 0 Fire = 0**REACTIVITY** 0 Reactivity = 0

· Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

Sodium Sulfide

· Table of Nonhazardous Ingredients

CAS: 7732-18-5 Water

4 First-aid measures

- · Description of first aid measures
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eve contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

(Contd. on page 3)

Printing date 01/12/2018

Reviewed on 01/12/2018

Trade name: Sodium Sulfide 10% w/v Aqueous Solution

(Contd. of page 2)

Personal precautions, protective equipment and emergency procedures	
Wear protective equipment. Keep unprotected persons away.	
Environmental precautions: No special measures required.	
Methods and material for containment and cleaning up:	
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).	
Use neutralizing agent.	
Dispose contaminated material as waste according to item 13.	
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.	
Protective Action Criteria for Chemicals	
PAC-1:	
Sodium Sulfide	0.17 mg/n
PAC-2:	
Sodium Sulfide	1.9 mg/n
PAC-3:	
Sodium Sulfide	11 mg/n

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities

· Storage:

- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 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.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: 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 skin.

US

Printing date 01/12/2018

Reviewed on 01/12/2018

Trade name: Sodium Sulfide 10% w/v Aqueous Solution

(Contd. of page 3)

Avoid contact with the eyes and skin.

- **Breathing equipment:** Not required.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation • Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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:



Tightly sealed goggles

· Body protection: Protective work clothing

Information on basic physical and Concernal Information	chemical properties	
General Information Appearance:		
Form:	Liquid	
Color:	Yellow-green liquid	
Odor:	Sulphurous	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	

Printing date 01/12/2018

Reviewed on 01/12/2018

Trade name: Sodium Sulfide 10% w/v Aqueous Solution

		(Contd. of page 4
Upper:	Not determined.	
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
· Density:	Not determined.	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wate	r): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Water:	90.3 %	
VOC content:	0.00~%	
	0.0 g/l / 0.00 lb/gl	
Solids content:	0.0 %	
• Other information	No further relevant information available.	

10 Stability and reactivity

• *Reactivity* No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 5,150 mg/kg

Dermal LD50 3,090 mg/kg

Sodium Sulfide

Oral LD50 500 mg/kg (ATE)

Dermal LD50 300 mg/kg (ATE)

· Primary irritant effect:

• on the skin: Irritant to skin and mucous membranes.

• on the eye: Strong irritant with the danger of severe eye injury.

• Sensitization: No sensitizing effects known.

(Contd. on page 6)

US

Printing date 01/12/2018

Reviewed on 01/12/2018

(Contd. of page 5)

Trade name: Sodium Sulfide 10% w/v Aqueous Solution

• Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further 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.*
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

· UN-Number · DOT, ADN, IMDG, IATA	Not regulated	
· UN proper shipping name · DOT, ADN, IMDG, IATA	Not regulated	
· Transport hazard class(es)		
· DOT, ADN, IMDG, IATA		
· Class	Not regulated	

Printing date 01/12/2018

Reviewed on 01/12/2018

Trade name: Sodium Sulfide 10% w/v Aqueous Solution

		(Contd. of page)
· Packing group · DOT, IMDG, IATA	Not regulated	
· Environmental hazards: · Marine pollutant:	No	
· Special precautions for user	Not applicable.	
• Transport in bulk according to Anne MARPOL73/78 and the IBC Code	e x II of Not applicable.	
· UN "Model Regulation":	Not regulated	

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

• Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

Water

· TSCA new (21st Century Act) (Substances not listed)

Sodium Sulfide

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). (Contd. on page 8)

Printing date 01/12/2018

Reviewed on 01/12/2018

Trade name: Sodium Sulfide 10% w/v **Aqueous Solution**

(Contd. of page 7)

US

· Hazard pictograms GHS05 · Signal word Danger · Hazard-determining components of labeling: Sodium Sulfide · Hazard statements Causes skin irritation. Causes serious eye damage. · Precautionary statements Wash thoroughly after handling. Wear protective gloves / eye protection / face protection. If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Specific treatment (see on this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Department issuing SDS: Environment protection department.

· Contact:

· Date of preparation / last revision 01-12-2018: review SDS for accuracy. STN Revision 0.1, 05-05-2015: revised to correct emergency and information contacts. STN Creation date for SDS 07-23-2014 ls 01/12/2018/-· Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (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 ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value (Contd. on page 9)

Printing date 01/12/2018

Trade name: Sodium Sulfide 10% w/v Aqueous Solution

(Contd. of page 8)

Reviewed on 01/12/2018

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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