

SECTION 1: Identification of the Substance / Mixture and of the Company / Undertaking**1.1. Product Identifier**

Trade name	: Sodium Hydrogen Sulphite
Chemical name	: Sodium Bisulphite 38 - 42% Solution
Product Use and Restrictions on Use	: Can be used in various industries from manufacturing, food and the oil and gas industry. In this concentration, it is mainly used as an Oxygen Scavenger in the oil and gas industry

1.2. Details of the Distributor of the Safety Data Sheet

Company Name	: GreenSol Limited
Address	: #39-41 Marryat Street, San Fernando, Trinidad, West Indies
Telephone	: +1(868) 225-4858
Mobile	: +1(868) 720-2517
Email	: sdeokiesingh@greensoltd.com

1.3. Emergency Telephone Number

Emergency Number	: +1(868) 720-2517 (GREENSOL)
	: +1(800) 424-9300 (CHEMTREC)

SECTION 2: Hazard Identification**2.1. Classification of the Substance or Mixture****GHS Classification**

Met. Corr. 1	: H290
Skin Irrit. 2	: H315
Eye Irrit. 2A	: H319
STOT SE 3	: H335
Aquatic Acute 3	: H402

2.2. Label Elements**GHS Labeling**

Hazard Pictogram :



GHS07



GHS05

Signal Word	: WARNING
Hazard Statement	: H290 - May be corrosive to metals.

Precautionary Statement : H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H402 - Harmful to aquatic life.

P261 - Avoid breathing vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P321 - Specific treatment (see section 4 on this SDS).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P390 - Absorb spillage to prevent material damage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations

Other Non-GHS Classification**HMIS Classification**

Health Hazard 2

Fire 0

Reactivity 0

NFPA Rating

Health Hazard 2

Flammability

Physical 0

Contact with acids liberates toxic gas. Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Unknown acute toxicity

No data available

SECTION 3: Composition / Information on Ingredients

Mixture

Name	Product Identifier	%	Classification
Water	(CAS No) 7732-18-5	58- 62	Not classified
Sodium Metabisulfite	(CAS No) 7631-90-5	38 - 42+	Acute Tox. 4 (Oral), H302 Aquatic Acute 3, H402

SECTION 4: First Aid Measures

4.1. Description of First Aid Measures

General	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible)
Inhalation	: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
Skin contact	: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists
Eye contact	: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention
Ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

General	: Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation.
Inhalation	: Irritation of the respiratory tract and the other mucous membranes. May cause an allergic reaction in sensitive individuals.
Skin contact	: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic reaction in sensitive individuals
Eye contact	: Contact causes severe irritation with redness and swelling of the conjunctiva.
Ingestion	: Ingestion may cause adverse effects.
Chronic Symptoms	: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable Extinguishing Media : Water spray, dry chemical, foam, carbon dioxide.
Unsuitable Extinguishing Media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

- Fire Hazard : Not flammable.
Hazardous decomposition products in case of fire : Contact with metallic substances may release flammable hydrogen gas.
Reactivity : May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. Under heated conditions or on contact with acids will produce the toxic gas sulfur dioxide.

5.3. Advice for Firefighters

- Precautionary Measures Fire : Exercise caution when fighting any chemical fire.
Firefighting instructions : Use water spray or fog for cooling exposed containers.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid enter sewers or waterways.
Hazardous Combustion Products : Sulfur Oxides.
Other Information : Do not allow run-off from firefighting to enter drains or water courses.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: Accidental Release Measures**6.1. Personal Precautions, Protective Equipment and Emergency Procedures**

- General Measures : Avoid breathing (vapor, mist, spray). Avoid all contact with skin, eyes, or clothing.
- For Non-Emergency Personnel**
- Protective equipment : Use appropriate personal protective equipment (PPE).
- Emergency procedures : Evacuate unnecessary personnel.
- For Emergency Personnel**
- Protective Equipment : Equip cleanup crew with proper protection.
- Emergency Procedures : Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning up

- Methods for Cleaning Up : Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Absorb spillage to prevent material damage.
- For Containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling & Storage

7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapors, mist, spray. Avoid contact with skin, eyes and clothing. Avoid contact with eyes, skin and clothing.
- Additional Hazards when processed : May be corrosive to metals.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

- Storage Conditions : Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures and

incompatible materials. Store in corrosive resistant container with a resistant inner liner.

Incompatible Materials : Acids. Metals. Oxidizers. Combustible materials.

Technical Measures : Comply with applicable regulations.

7.3. Specific End Use(s)

For the manufacture of oxygen scavenging and dichlorination, bleaching agent, and papermaking.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits

Component	Regulation	Type of listing	Value
Sodium Bisulphite	NIOSH	REL-TWA	5 mg/m ³
	ACGIH	TWA	5 mg/m ³

8.2. Engineering Controls

Ventilation Requirements : Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions should be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.

Other : A soak hose and eyewash station or emergency shower and eyewash station should be available, tested, and be in close proximity to the product being handled in accordance with provincial regulations

8.3. Protective equipment

The following are recommendations only. It is the responsibility of the employer / user to conduct a hazard assessment of the process in which this product being used and determine the proper engineering controls and PPE for their process. Additional regulatory and safety information should be sought from local authorities and, if needed, a professional industrial hygienist.

Eye and face protection : Where there is potential eye or face exposure, tightly fitting goggles and a face shield or a full-face respirator or similar protective equipment which protects the wearer's face and eyes are recommended. Contact lenses are not recommended as they may contribute to severe injury.

Hand and body protection : Where handling this product avoid skin contact.

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection : Not available.

Materials for Protective Clothing : Chemically resistant materials and fabrics.

Hand Protection	: Wear protective gloves.
Eye Protection	Chemical safety goggles
Skin and Body Protection	Wear suitable protective clothing.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Other Information	: When using, do not eat, drink or smoke.

SECTION 9: Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Pale yellow
Odor	: Pungent Sulfurous
Odor Threshold	: Not available
pH	: 3.8 – 5.0
Evaporation	: Not available
Melting Point	: Not applicable
Freezing Point	: 6 °C (42.8 °F)
Boiling Point	: 104 °C (219.2 °F)
Flash Point	: Not available
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable limit	: Not applicable
Upper Flammable Limit	: Not applicable
Vapor Pressure	: 10.4 kPa (78 mm Hg) @ 20°C (68 °F)
Relative vapor density at 20	: Not available
Relative density	: Not available
Specific density	: 1.3 - 1.4 at 25oC
Solubility	: Water: Miscible in all proportions in water
Partition Coefficient: N	: Not available
Octanol/water	
Viscosity	: Not available

SECTION 10: Stability and Reactivity

Reactivity	: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. Under heated conditions or on contact with acids will produce the toxic gas sulfur dioxide.
Chemical Stability	: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions	: Hazardous polymerization will not occur.
Conditions to Avoid	: Extremely high or low temperatures and incompatible materials.
Incompatible Materials	: Acids. Metals. Oxidizers. Combustible materials.
Hazardous Decomposition Products	: None expected under normal conditions of use.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral)	: Not classified
Acute Toxicity (Dermal)	: Not classified
Acute Toxicity (Inhalation)	: Not classified
LD50 and LC50 Data	: Not available
Skin corrosion/irritation	: Causes skin irritation.
pH	: 2.9 – 4.2
Eye damage/irritation	: Causes serious eye irritation.
pH	: 2.9 – 4.2
Respiratory or Skin Sensitization	: Not classified
Germ Cell Mutagenicity	: Not classified
Carcinogenicity	: Not classified
Specific Target Organ Toxicity (Repeated Exposure)	: Not classified
Reproductive Toxicity	: Not classified
Specific Target Organ Toxicity (Single Exposure)	: May cause respiratory irritation.
Aspiration Hazard	: Not classified
Symptoms/Effects After Inhalation	: Irritation of the respiratory tract and the other mucous membranes. May cause an allergic reaction in sensitive individuals
Symptoms/Effects After Skin Contact	: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic reaction in sensitive individuals.
Symptoms/Effects After Eye Contact	: Contact causes severe irritation with redness and swelling of the conjunctiva.
Symptoms/Effects After Ingestion	: Ingestion may cause adverse effects.
Chronic Symptoms	: None expected under normal conditions of use.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data

Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg
Sodium bisulphite (7631-90-5)	
LD50 Oral Rat	1310 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	>= 5.5 mg/l/4h
Sodium bisulphite (7631-90-5)	



IARC Group

3

SECTION 12: Ecological Information

12.1. Toxicity

Ecology – general : Harmful to aquatic life.
 Sodium bisulfite (7631-90-5)
 EC50 Daphnia 1 : 119 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability

Sodium Bisulfite Solution
 Persistence and Degradability : Not established

12.3. Bio accumulative potential

Sodium Bisulfite Solution
 Bioaccumulative Potential : Not established

12.4. Mobility in Soil

Not available

12.6. Other Adverse Effects

Additional Information : Avoid release to the environment

SECTION 13: Disposal Considerations





13.1. Waste Treatment Methods

Waste Disposal Recommendations : Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.
 Additional Information : Container may remain hazardous when empty. Continue to observe all precautions.
 Ecology - Waste Materials : Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: Transportation Information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

TRANSPORTATION CLASSIFICATION	DOT	TDG	IMDG	IATA
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Identification Number	UN2693	UN2693	UN2693	UN2693
Proper Shipping Name	BISULPHITES, AQUEOUS SOLUTIONS, N.O.S.	BISULPHITES, AQUEOUS SOLUTIONS, N.O.S.	BISULPHITES, AQUEOUS SOLUTIONS, N.O.S.	BISULPHITES, AQUEOUS SOLUTIONS, N.O.S.
Transport Hazard Class(es)	8	8	8	8
				
Packing Group	III	III	III	III
Environment Hazards	Marine Pollutant: No	Marine Pollutant: No	Marine Pollutant: No	Marine Pollutant: No
Emergency Response	ERG Number: 154	ERAP Index: Not applicable	EMS: F-A, S-B	ERG code (IATA): 8L
Additional Information	Not applicable	Not applicable	Not applicable	Not applicable

SECTION 15: Regulatory Information

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313
Sodium bisulphite	5000lb	Not applicable	Not applicable	No

SARA 311/312

Sodium Bisulphite Solution

Immediate (acute) health hazard

US TSCA Flags Not present

Canadian Regulations

Sodium bisulphite (7631-90-5)

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

International Inventories/Lists

Chemical Name (CAS No.)	Australia AICS	Turkey CICR	Korea ECL	EU EINECS	EU EINCECS	EU SVHC	EU NLP	Mexico INSQ
Sodium bisulphite (7631-90-5)	YES	YES	YES	YES	NO	NO	NO	YES
Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR	Philippines PICCS	New Zealand NZIOC	USA TSCA



Sodium
bisulphite
(7631-90-5)

YES

YES

NO

NO

NO

YES

YES

YES

SECTION 16: Other Information

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H290	May be corrosive to metals
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H402	Harmful to aquatic life

NFPA 704

NFPA Health Hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA Fire Hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically non-combustible materials such as concrete, stone, and sand.
NFPA Reactivity Hazard	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water

HMIS Rating

Health:	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard
PPE	: See section 8

Notice to Reader:

This SDS provides the information contained in this document in good faith but makes no representation as to its accuracy. This document is intended solely to guide the safe handling of the material by a properly trained individual. The final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be handled with caution. Although some hazards are described, it cannot be guaranteed that these are the only hazards that exist.



Version	Date of Change	Change Description	Responsible Person
1	23-02-2024	Updated to supplier SDS Rev. 1	Laboratory Coordinator