

SECTION 1: Identification of the Substance / Mixture and of the Company / Undertaking

1.1. Product Identifier

Substance name : Sodium Nitrite
EC-No. : 231-555-9
CAS-No. : 7632-00-0
REACH registration No : 01-2119471836-27-xxxx

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1. Relevant Identified Uses

Main use category : Industrial use
Industrial/Professional use spec : Intermediate

1.3. 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@greensolltd.com

1.4. 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

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Solids, Category 2 : H272
Acute toxicity (oral), Category 3 : H301
Serious eye damage/eye irritation, Category 2 : H319
Hazardous to the aquatic environment — Acute Hazard, Category 1 : H400
Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects

May intensify fire; oxidizer. Toxic if swallowed. Causes serious eye irritation. Very toxic to aquatic life.

2.2. Label Elements

Hazard Pictogram :



Signal Word :

DANGER

Hazard Statement :

H272 - May intensify fire; oxidizer

H301 - Toxic if swallowed

H319 - Causes serious eye irritation

H400 - Very toxic to aquatic life

Precautionary Statement :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P221 - Take any precaution to avoid mixing with combustible materials

P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337+P313 - If eye irritation persists: Get medical advice/attention

2.3. Other Hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition / Information on Ingredients

3.1. Substances

Name	Product Identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sodium nitrite	(CAS No) 7632-00-0 (EC no) 231-555-9 (REACH-no) 01-2119471836-27-xxxx	100	Ox. Sol. 2, H272 Acute Tox. 3 (Oral), H301 Eye Irrit. 2, H319 Aquatic Acute 1, H400

Full text of H-statements: see section 16

SECTION 4: First Aid Measures

4.1. Description of First Aid Measures

First-aid measures general : Call a physician immediately.

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures ingestion : Rinse mouth. Call a physician immediately.

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

- Symptoms/injuries after eye contact : Eye irritation

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable Extinguishing Media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

- Fire Hazard : May intensify fire; oxidizer.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for Firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental Precautions

Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning up

For containment	: Collect spillage.
Methods for Cleaning Up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters.
Other Information	: Dispose of materials or solid residues at an authorized site

6.4. Reference to Other Sections

For further information refer to section 13.

SECTION 7: Handling & Storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions	: Store locked up. Store in a well-ventilated place. Keep cool.
Incompatible Materials	: combustible materials.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

sodium nitrite (7632-00-0)

DNEL/DMEL (Workers)

Acute - local effects, inhalation : 2 mg/m³

Long-term - systemic effects, : 2 mg/m³

inhalation

PNEC (Water)

PNEC aqua (freshwater) : 0,005 mg/l

PNEC aqua (marine water) : 0,006 mg/l

PNEC aqua (intermittent, : 0,019 mg/l

freshwater)

PNEC aqua (intermittent, marine : 0,022 mg/l

water)

PNEC (Soil)

PNEC soil : 0,001 mg/kg dwt
 PNEC (STP)
 PNEC sewage treatment plant : 21 mg/l

8.2. Exposure Controls

Appropriate engineering controls : Ensure good ventilation of the work station.
 Hand protection : Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves, Disposable gloves	Natural rubber	6 (> 480 minutes)	0.5	-	-
Reusable gloves, Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.35	-	-

Eye protection : Safety glasses

Type	Use	Characteristics	Standard
Safety glasses	-	With side shields	-

Skin and body protection : Wear suitable protective clothing
 Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Dust mask	Type P2, Type P3	-	-

Environmental exposure controls : Avoid release to the environment

SECTION 9: Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid
 Appearance : Crystalline powder
 Molecular Mass : 62.07 g/mol
 Colour : White
 Odour : Odourless
 Odour Threshold : No data available
 pH : No data available
 Relative evaporation rate (butyl acetate=1) : No data available
 Melting Point : 271 - 280 °C



Freezing Point	: No data available
Boiling Point	: 320 °C
Flash Point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Density	: 2,17 g/cm ³
Solubility	: Water: 82 g/l - 20 °C
Log Pow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive Limits	: Not applicable

SECTION 10: Stability and Reactivity

10.1. Reactivity

May intensify fire; oxidizer.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of Hazardous Reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to Avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible Materials

Combustible materials.

10.6. Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed.

sodium nitrite (7632-00-0)

LD50 oral rat : > 180 mg/kg

LC50 inhalation rat (mg/l) : 5 mg/kg

Skin corrosion/irritation : 0,54 - 26,3 mg/l

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological Information**12.1. Toxicity**

Ecology - general : Very toxic to aquatic life.

sodium nitrite (7632-00-0)

LC50 fish 1 : 0,54 - 26,3 mg/l

EC50 Daphnia 1 : 15,4 mg/l

EC50 72h algae (1) : > 100 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.4. Other adverse effects
















No additional information available

SECTION 13: Disposal Considerations
13.1. Waste Treatment Methods

Waste Treatment Methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transportation Information

In accordance with ADR / RID / IMDG / IATA / AND

ADR	IMDG	IATA	ADN	RID
14.1. UN Number				
1500	1500	1500	1500	1500
14.2. UN Proper Shipping Name				
SODIUM NITRITE	SODIUM NITRITE	Sodium nitrite	SODIUM NITRITE	SODIUM NITRITE
14.3. Transport Hazard Class (es)				
5.1 (6.1)	5.1 (6.1)	5.1 (6.1)	5.1 (6.1)	5.1 (6.1)
				
				
				
14.4. Packing Group				
III	III	III	III	III
14.5. Environment Hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

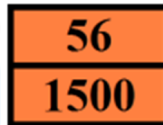
14.6. Special Precautions for User
-Overland Transport

Classification code (ADR) : OT2

Limited quantities (ADR) : 5kg



Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, R001
Special packing provisions (ADR)	: B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T1
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAN
Tank special provisions (ADR)	: TU3
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV24, CV28
Hazard identification number (Kemler No.)	: 56
Orange plates	:



Tunnel restriction code (ADR)	: E
EAC code	: 1Z

-Transport by Sea

Limited quantities (IMDG)	: 5kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-Q
Stowage category (IMDG)	: A
Segregation (IMDG)	: SG38, SG49
Properties and observations (IMDG)	: Colourless deliquescent solid. Soluble in water. Mixtures with combustible material are readily ignited and may burn fiercely. Mixtures with ammonium compounds or cyanides may explode. Decomposes if heated, giving off toxic nitrous fumes and gases supporting combustion. Harmful if swallowed or by dust inhalation.

-Air Transport

PCA Excepted quantities (IATA)	: E1
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PCA Limited quantities (IATA)	: Y546
PCA limited quantity max net quantity (IATA)	: 10kg
PCA packing instructions (IATA)	: 559
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 563
CAO max net quantity (IATA)	: 100kg
ERG code (IATA)	: 5P

-Inland Waterway Transport

Classification code (ADN)	: OT2
Special provisions (ADN)	: 802
Limited quantities (ADN)	: 5kg
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EP

-Rail Transport

Classification code (RID)	: OT2
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, R001
Special packing provisions (RID)	: B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAN
Special provisions for RID tanks (RID)	: TU3
Transport category (RID)	: 3
Special provisions for carriage - Loading, unloading and handling (RID)	: CW24, CW28
Colis express (express parcels) (RID)	
Hazard identification number (RID)	: CE11
	: 56

14.7. Transport in Bulk According to Annex II of Marpol and the IBC Code

Not Applicable

SECTION 15: Regulatory Information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

No REACH Annex XVII restrictions
sodium nitrite is not on the REACH Candidate List

15.1.2. National regulations

No additional information available

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Median Lethal Dose
CLP	No-Observed Adverse Effect Level
DMEL	No-Observed Effect Concentration
DNEL	Persistent Bio accumulative Toxic
DPD	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
DSD	Safety Data Sheet
EC50	Very Persistent and Very Bio accumulative
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rai
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:

Acute Tox. 3 (Oral)	: Acute toxicity (oral), Category 3
Aquatic Acute 1	: Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Irrit. 2	: Serious eye damage/eye irritation, Category 2



Ox. Sol. 2 : Oxidising Solids, Category 2
H272 : May intensify fire; oxidiser
H301 : Toxic if swallowed
H319 : Causes serious eye irritation
H400 : Very toxic to aquatic life

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
2	20-09-2024	Updated to supplier SDS Rev. 2	Laboratory Coordinator

