

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes Date 04-Oct-2019

Revision date 27-Jul-2023

Revision Number 5

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) 10057

Safety data sheet number 10057

Product Name SODIUM NITRITE SOLUTION

Synonyms SOD NITRITE 25% SOL SODIUM NITRITE 30% DIAZOTIZING SALT SODIUM NITRITE 40%

Pure substance/mixture Mixture

Contains SODIUM NITRITE

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Chemical

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute toxicity - Oral	Category 4 - (H302)
Serious eye damage/eye irritation	Category 2 - (H319)
Acute aquatic toxicity	Category 1 - (H400)

2.2. Label elements

Contains SODIUM NITRITE

**Signal word**

Warning

Hazard statements

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

H400 - Very toxic to aquatic life

Precautionary statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P273 - Avoid release to the environment

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

P321 - Specific treatment (see .? on this label)

P391 - Collect spillage

P501 - Dispose of contents/ container to an approved waste disposal plant

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

Additional information

This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
SODIUM NITRITE 7632-00-0	> 25%	231-555-9	-	Eye Irrit. 2 (H319) Aquatic Acute 1 (H400)	-	-	-

				Ox. Sol. 3 (H272) Acute Tox. 3 (H301)			
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Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air in case of accidental inhalation of vapours. Call a doctor immediately.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Remove material from skin immediately. Get medical attention if irritation develops and persists.
Ingestion	Remove from exposure, lie down. Drink 1 or 2 glasses of water. Call a doctor immediately.

4.2. Most important symptoms and effects, both acute and delayed

Eyes	Causes serious eye irritation.
Ingestion	Harmful if swallowed

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

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Carbon oxides. Nitrogen oxides (NOx).
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Collect spillage.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.
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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling	Ensure adequate ventilation.
General hygiene considerations	Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities**7.3. Specific end use(s)**

Specific use(s)
See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Exposure Limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Biological occupational exposure limits	This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.
Derived No Effect Level (DNEL) - Workers	

Chemical name	Oral	Dermal	Inhalation
SODIUM NITRITE 7632-00-0			2 mg/m ³ [4] [6]
SODIUM NITRATE 7631-99-4		20.8 mg/kg/day [4] [6]	36.7 mg/m ³ [4] [6]

[4] Systemic health effects.
[6] Long term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
SODIUM NITRATE 7631-99-4	12.5 mg/kg/day [4] [6]	12.5 mg/kg/day [4] [6]	10.9 mg/m ³ [4] [6]

[4] Systemic health effects.
[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
SODIUM NITRITE 7632-00-0	0.0054 mg/l		0.00616 mg/l		
SODIUM NITRATE 7631-99-4	0.45 mg/l		0.045 mg/l		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
SODIUM NITRITE 7632-00-0	0.0195 mg/kg	0.0223 mg/kg		0.000733 mg/kg	21 mg/l
SODIUM NITRATE 7631-99-4			18 mg/L		18 mg/l

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Use eye protection according to EN 166.

Hand protection Gloves must conform to standard EN 374.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	No information available
Odour	Characteristic.
Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point		No information available
Initial boiling point and boiling range	105 - 111 °C	
Flammability		No information available
Flammability Limit in Air		No information available
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
pH	7.0 - 9.0	
pH (as aqueous solution)		No information available
Kinematic viscosity		No information available
2.0 - 3.0 cSt 20		
		Dynamic viscosity 2 - 3 mPa s @ 20°C
		Water solubility Miscible in water
		Solubility(ies) Insoluble in the following materials:, Ethanol
		Partition coefficient
		Vapour pressure 80 - 110 mbar @ 50°C
		Relative density 1.345 @ 20°C
		Bulk density
No information available		
Relative vapour density		No information available
Particle characteristics		No information available
Particle Size		
Particle Size Distribution		
Explosive properties	Not considered to be explosive	
Oxidising properties	Does not meet the criteria for classification as oxidising	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No information available.
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10.2. Chemical stability

Stability	Stable under normal conditions.
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Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal processing.
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10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

10.5. Incompatible materials

Incompatible materials Reducing agent. Acids. Combustible material.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxygen. Carbon oxides. Nitrogen oxides (NOx).

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

Inhalation May cause irritation of respiratory tract.

Eye contact Causes eye irritation.

Skin contact Causes mild skin irritation.

Ingestion Toxic if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity**Numerical measures of toxicity**

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 188.90 mg/kg

ATEmix (inhalation-dust/mist) 12.20 mg/l

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
SODIUM NITRITE	= 85 mg/kg (Rat)	-	= 5.5 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Very toxic to aquatic life.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
SODIUM NITRITE	-	LC50: =0.19mg/L (96h, Oncorhynchus mykiss) LC50: 0.092 - 0.13mg/L (96h, Oncorhynchus mykiss) LC50: 0.4 - 0.6mg/L (96h, Oncorhynchus mykiss) LC50: 0.65 - 1mg/L (96h, Oncorhynchus mykiss) LC50: =2.3mg/L (96h, Pimephales promelas) LC50: =20mg/L (96h, Pimephales promelas)	-	-

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
SODIUM NITRITE	-3.7

12.4. Mobility in soil

Mobility in soil Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
SODIUM NITRITE	The substance is not PBT / vPvB PBT assessment does not apply

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number UN3082
 14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (SODIUM NITRITE)
 14.3 Transport hazard class(es) 9
 14.4 Packing group III
 14.5 Environmental hazards Yes
 14.6 Special precautions for user
 Special Provisions A97, A158, A197
 ERG Code 9L

IMDG

14.1 UN number or ID number UN3082
 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (SODIUM NITRITE)
 14.3 Transport hazard class(es) 9
 14.4 Packing group III
 14.5 Environmental hazards Yes
 14.6 Special precautions for user
 Special Provisions 274, 335, 969
 EmS-No F-A, S-F
 14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN number or ID number UN3082
 14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (SODIUM NITRITE)
 14.3 Transport hazard class(es) 9
 14.4 Packing group III

14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 375, 601
Classification code	M6

ADR

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (SODIUM NITRITE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 601, 375
Classification code	M6
Tunnel restriction code	(-)

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (UK REACH - Annex XIV). This product does not contain substances subject to restriction (UK REACH - Annex XVII).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Chemical name	Poisons and Explosive Precursors
SODIUM NITRITE	Poison, Reportable

International Inventories**TSCA**

Contact supplier for inventory compliance status

DSL/NDL

Contact supplier for inventory compliance status

EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H272 - May intensify fire; oxidiser
 H301 - Toxic if swallowed
 H319 - Causes serious eye irritation
 H400 - Very toxic to aquatic life

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note ***Indicates updated data since last publication

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method

Aspiration hazard
Ozone

Calculation method
Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGLS)
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Prepared By Jitendra Panchal

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**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet