

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Date of issue: 07/04/2011 Revision date: 16/03/2023 Supersedes version of: 11/11/2020 Version: 2.3

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

: NaNO2

1.1. Product identifier

Product form : Substance

Trade name : UN1500 Sodium nitrite AGR

 Chemical name
 : sodium nitrite

 IUPAC name
 : sodium nitrite

 EC Index-No.
 : 007-010-00-4

 EC-No.
 : 231-555-9

 CAS-No.
 : 7632-00-0

 REACH registration No
 : 01-2119471836-27

 Product code
 : SONI-00A

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

1.2.1. Relevant identified uses

Main use category : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

labbox labware s.l.

Migjorn, 1

Formula

P.O. Box Barcelona (SPAIN)

08338 Premia de Dalt - SPAIN

ES

T +34 937 07 79 70 - F +34 937 909 532 info@labbox.com - www.labbox.com

1.4. Emergency telephone number

Emergency number

: +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Oxidising Solids, Category 3 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 and EUH statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

Hazard pictograms (CLP)







GHS03

GHS06

GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H272 - May intensify fire; oxidiser.

H301 - Toxic if swallowed.

H319 - Causes serious eye irritation. H400 - Very toxic to aquatic life.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P220 - Keep away from clothing and other combustible materials. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

 Substance type
 : Mono-constituent

 Name
 : Sodium nitrite

 CAS-No.
 : 7632-00-0

 EC-No.
 : 231-555-9

 EC Index-No.
 : 007-010-00-4

Name	Product identifier	%
sodium nitrite	CAS-No.: 7632-00-0 EC-No.: 231-555-9 EC Index-No.: 007-010-00-4 REACH-no: 01-2119471836- 27	≥ 98

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial

respiration if necessary.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get

medical advice/attention.

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 after ingestion : Rinse mouth. Call a physician immediately.

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

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Harmful if swallowed. Abdominal pain.

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

Never give anything by mouth to an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Carbon dioxide. Foam. Dry powder.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible. Hazardous decomposition products in case of fire : Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with eyes.

6.1.2. For emergency responders

Protective equipment : Breathing apparatus.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Collect spillage. Shovel or sweep up and put in a closed container for disposal.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Protect from moisture. Keep containers closed.

Precautions for safe handling : Avoid contact with skin and eyes. Provide good ventilation in process area to prevent

formation of vapour.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Store in a well-ventilated place. Keep container tightly closed.

Storage area : Store in a well-ventilated place. Store in a cool, well-ventilated place. Keep container tight

closed. Keep away from (strong) acids. Labelling.

Special rules on packaging : Keep only in original container. Store in a closed container.

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7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

UN1500 Sodium nitrite AGR (7632-00-0)		
DNEL/DMEL (Workers)		
Acute - systemic effects, inhalation	2 mg/m³	
Long-term - systemic effects, inhalation	2 mg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	0,0054 mg/l	
PNEC aqua (marine water)	0,00616 mg/l	
PNEC aqua (intermittent, freshwater)	0,0054 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0,0195 mg/kg dwt	
PNEC sediment (marine water)	0,0223 mg/kg dwt	
PNEC (Soil)		
PNEC soil	0,000733 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	21 mg/l	

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. EN 374.

Personal protective equipment symbol(s):







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8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

ye protection			
Туре	Field of application	Characteristics	Standard
		With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves against chemicals (EN 374)

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
		6 (> 480 minutes)	cloruro de polivinilo (PVC) - 0.7 mm de espesor del recubrimiento / caucho nitrilo (NBR) - 0.4 mm espesor del recubrimiento / caucho cloropreno (CR) - 0.5 mm de espesor del recubrimiento / caucho butílico (butilo) - 0.7 mm espesor del recubrimiento / elastómero de fluor (FKM) - 0.7 mm de espesor del recubrimiento /		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

Respiratory protection				
	Device	Filter type	Condition	Standard
	Dust mask	Type P3		EN 143

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

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Colour : white, light yellow.

Molecular mass : 69 g/mol Odour odourless. Not available Odour threshold Melting point 271 °C Freezing point Not available Boiling point Not available Flammability Not available **Explosive limits** : Not applicable Lower explosion limit : Not applicable : Not applicable Upper explosion limit : Not applicable Flash point : > 320 °C Auto-ignition temperature Decomposition temperature : Not available

9 5%, 20° CNot availableNot applicableSoluble in water.

Water: 450 g/100cm3 200 C

Partition coefficient n-octanol/water (Log Kow) : Not available

Partition coefficient n-octanol/water (Log Pow) : -3,7

Vapour pressure : Not available
Vapour pressure at 50 °C : Not available
Density : 2,15 g/cm³ 20° C
Relative density : Not available
Relative vapour density at 20 °C : Not applicable
Particle size : Not available

9.2. Other information

рΗ

pH solution

Solubility

Viscosity, kinematic

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable in use and storage conditions as recommended in item 7.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Toxic vapours are released.

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SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Toxic if swallowed. Acute toxicity (dermal) Not classified Acute toxicity (inhalation) Not classified

LD50 oral rat 180 mg/kg bodyweight Animal: rat, Animal sex: male

Skin corrosion/irritation : Not classified pH: 9 5%, 20° C

Serious eye damage/irritation Causes serious eye irritation.

pH: 9 5%, 20° C

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity Not classified Reproductive toxicity Not classified STOT-single exposure Not classified STOT-repeated exposure : Not classified

UN1500 Sodium nitrite AGR (7632-00-0)

NOAEL (subchronic, oral, animal/male, 90 days) 220 mg/kg bodyweight Animal: mouse, Animal sex: male NOAEL (subchronic, oral, animal/female, 90 days) 165 mg/kg bodyweight Animal: mouse, Animal sex: female

Aspiration hazard Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and

symptoms

: Toxic if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term

(acute)

: Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term : Not classified (chronic)

UN1500 Sodium nitrite AGR (7632-00-0)	
LC50 - Fish [1]	0,54 – 26,3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Daphnia [1]	15,4 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

UN1500 Sodium nitrite AGR (7632-00-0)

Partition coefficient n-octanol/water (Log Pow) -3,7

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Must follow special treatment according to local regulation.

SECTION 14: Transport information

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

14.1. UN number or ID number

 UN-No. (ADR)
 : UN 1500

 UN-No. (IMDG)
 : UN 1500

 UN-No. (IATA)
 : UN 1500

 UN-No. (ADN)
 : UN 1500

 UN-No. (RID)
 : UN 1500

14.2. UN proper shipping name

Proper Shipping Name (ADR) : SODIUM NITRITE
Proper Shipping Name (IMDG) : SODIUM NITRITE
Proper Shipping Name (IATA) : Sodium nitrite
Proper Shipping Name (ADN) : SODIUM NITRITE
Proper Shipping Name (RID) : SODIUM NITRITE

Transport document description (ADR) : UN 1500 SODIUM NITRITE, 5.1 (6.1), III, (E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 1500 SODIUM NITRITE, 5.1 (6.1), III, MARINE POLLUTANT/ENVIRONMENTALLY

HAZARDOUS

Transport document description (IATA) : UN 1500 Sodium nitrite, 5.1 (6.1), III, ENVIRONMENTALLY HAZARDOUS

Transport document description (ADN) : UN 1500 SODIUM NITRITE, 5.1 (6.1), III, ENVIRONMENTALLY HAZARDOUS

Transport document description (RID) : UN 1500 SODIUM NITRITE, 5.1 (6.1), III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 5.1 (6.1)
Danger labels (ADR) : 5.1, 6.1

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IMDG

Transport hazard class(es) (IMDG) : 5.1 (6.1) Danger labels (IMDG) : 5.1, 6.1



IATA

Transport hazard class(es) (IATA) : 5.1 (6.1) Danger labels (IATA) 5.1, 6.1



ADN

: 5.1 (6.1) Transport hazard class(es) (ADN) Danger labels (ADN) : 5.1, 6.1





RID

Transport hazard class(es) (RID) : 5.1 (6.1) Danger labels (RID) 5.1, 6.1







14.4. Packing group

Packing group (ADR) : III : III Packing group (IMDG) Packing group (IATA) : 111 Packing group (ADN) : 111 Packing group (RID) : 111

14.5. Environmental hazards

Dangerous for the environment : Yes Marine pollutant : Yes

: No supplementary information available Other information

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 : TP33

(ADR)

: SGAN Tank code (ADR) Tank special provisions (ADR) : TU3 Vehicle for tank carriage : AT

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Transport category (ADR) : 3

Special provisions for carriage - Loading, unloading : CV24, CV28

and handling (ADR)

Hazard identification number (Kemler No.) : 56

Orange plates :

56 1500

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

Transport by sea

Limited quantities (IMDG) : 5 kg 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 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 : 100kg CAO max net quantity (IATA) ERG code (IATA) : 5P

Inland waterway transport

Classification code (ADN) : OT2
Special provisions (ADN) : 802
Limited quantities (ADN) : 5 kg
Excepted quantities (ADN) : E1
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

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 : TP33

(RID)

Tank codes for RID tanks (RID) : SGAN Special provisions for RID tanks (RID) : TU3
Transport category (RID) : 3

Special provisions for carriage - Loading, unloading : CW24, CW28

and handling (RID)

Colis express (express parcels) (RID) : CE11

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Hazard identification number (RID) : 56

14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

REACH Annex XIV (Authorisation List)

UN1500 Sodium nitrite AGR is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

UN1500 Sodium nitrite AGR is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

UN1500 Sodium nitrite AGR is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

UN1500 Sodium nitrite AGR is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Sodium nitrite is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV; ID No. 161).

Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must

be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the

shipping route (according to § 10).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Ontwikkeling

The substance is not listedThe substance is not listed

: The substance is not listed

: The substance is not listed

: The substance is not listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

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15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

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	
H272	May intensify fire; oxidiser.	
H301	Toxic if swallowed.	
H319	Causes serious eye irritation.	
H400	Very toxic to aquatic life.	
Ox. Sol. 3	Oxidising Solids, Category 3	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.