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SODIUM NITRITE MSDS

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

1.1 Product identifiers

Product name :	Sodium Nitrite
Product Code –	S 2167
CAS-No. :	7632-00-0

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses : Laboratory chemicals, Industrial & for professional use only.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Oxidizing solids (Category 3), H272
Acute toxicity, Oral (Category 3), H301
Eye irritation (Category 2), H319
Acute aquatic toxicity (Category 1), H400
For the full text of the H-Statements mentioned in this Section, see Section 16.
2.2 Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram

Signal word	Danger
Hazard statement(s)	
H272	May intensify fire; oxidizer.
H301	Toxic if swallowed.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life
Precautionary statement(s)	
P220	Keep/Store away from clothing/ combustible materials.
P273	Avoid release to the environment.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula :	NaNO2
Molecular weight :	69.00 g/mol
CAS-No. :	7632-00-0
EC-No. :	231-555-9
Index-No. :	007-010-00-4

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Sodium nitrite			
CAS-No.	7632-00-0	Ox. Sol. 3; Acute Tox. 3; Eye Irrit. 2; Aquatic Acute 1; H272, H301, H319, H400 M-Factor - Aquatic Acute: 1	<= 100 %
EC-No.	231-555-9		
Index-No.	007-010-00-4		

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2 Special hazards arising from the substance or mixture
Nitrogen oxides (NOx), Sodium oxides
5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
5.4 Further information
Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.
6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3 Methods and materials for containment and cleaning up
Sweep up and shovel.\'20 Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.
6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.Keep away from heat and sources of ignition.
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
hygroscopic
Storage class (TRGS 510): Oxidizing hazardous materials
7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
8.2 Exposure controls
Appropriate engineering controls
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling

the product.
Personal protective equipment
Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
a) Appearance Form: solid
b) Odour odourless
c) Odour Threshold No data available
d) pH 9
e) Melting point/freezing point Melting point/range: 271 °C - lit.
f) Initial boiling point and boiling range 320 °C
g) Flash point No data available
h) Evaporation rate No data available
i) Flammability (solid, gas) No data available
j) Upper/lower flammability or explosive limits No data available
k) Vapour pressure < 0.0001 hPa at 25 °C
l) Vapour density No data available
m) Relative density 2.168 g/cm3
n) Water solubility 820 g/l at 20 °C
o) Partition coefficient: n-octanol/water log Pow: -3.7 at 25 °C
p) Auto-ignition temperature No data available
q) Decomposition temperature No data available
r) Viscosity No data available
s) Explosive properties No data available
t) Oxidizing properties The substance or mixture is classified as oxidizing with the category 3.
9.2 Other safety information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available
10.2 Chemical stability
Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid

Exposure to moisture
10.5 Incompatible materials
Acids, Powdered metals, Ammonia, Cyanides, Amines, Activated carbon, Combustible material, Reducing agents
10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NOx), Sodium oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - 157.9 mg/kg(Sodium nitrite)
LD50 Oral - Mouse - 175 mg/kg(Sodium nitrite)
Remarks: Vascular:BP lowering not charactertized in autonomic section. Vascular:Regional or general arteriolar or venous dilation.
Skin corrosion/irritation
Skin - Rabbit(Sodium nitrite)
Result: No skin irritation - 48 h
(OECD Test Guideline 404)
Serious eye damage/eye irritation
Eyes - Rabbit(Sodium nitrite)
Result: Eye irritation - 24 h
(OECD Test Guideline 405)
Respiratory or skin sensitisation
No data available(Sodium nitrite)
Germ cell mutagenicity
No data available(Sodium nitrite)
Carcinogenicity
IARC: 2A - Group 2A: Probably carcinogenic to humans (Sodium nitrite)
Reproductive toxicity
No data available(Sodium nitrite)
Specific target organ toxicity - single exposure
No data available(Sodium nitrite)
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available(Sodium nitrite)
Additional Information
RTECS: RA1225000
Headache, Nausea, Incoordination., Absorption into the body leads to the formation of methemoglobin which in delayed 2 to 4 hours or longer.(Sodium nitrite)
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Sodium nitrite)
Liver - Irregularities - Based on Human Evidence(Sodium nitrite)

SECTION 12: Ecological information

Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 0.94 - 1.92 mg/l - 96.0 h(Sodium nitrite) mortality NOEC - Oncorhynchus mykiss (rainbow trout) - 0.54 mg/l - 96.0 h(Sodium nitrite)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 12.5 mg/l - 48 h(Sodium nitrite)
Toxicity to algae	NOEC - Desmodesmus subspicatus (green algae) - 100 mg/l - 72 h(Sodium nitrite) (OECD Test Guideline 201)

12.2 Persistence and degradability
The methods for determining biodegradability are not applicable to inorganic substances.
12.3 Bioaccumulative potential
No data available
12.4 Mobility in soil

No data available(Sodium nitrite)
12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
12.6 Other adverse effects
Very toxic to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 1500	IMDG: 1500	IATA: 1500

14.2 UN proper shipping name

ADR/RID:	SODIUM NITRITE
IMDG:	SODIUM NITRITE
IATA:	Sodium nitrite

14.3 Transport hazard class(es)

ADR/RID: 5.1 (6.1)	IMDG: 1500	IATA: 1500

14.4 Packaging group

ADR/RID: III	IMDG: III	IATA: III

14.5 Environmental hazards

ADR/RID: no	IMDG Marine pollutant: no	IATA: no

14.6 Special precautions for user
No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

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

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