

SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006

1. Identification of the substance/mixture and of the company/undertaking**Product identifier:****2M Sodium Nitrite****Relevant identified uses of the substance or mixture and uses advised against:**

Laboratory use.

Details of the supplier of the safety data sheet:

SSI Diagnostica A/S

Herredsvvej 2

Phone.: +45 4829 9100

DK-3400 Hillerød, Denmark

Fax: +45 4829 9179

Responsible person for the safety data sheet (e-mail):

info@ssidiagnostica.com **Emergency telephone:**

+45 4829 9100 (within office hours)

2. Hazards identification**Classification of the substance or mixture:**

Harmful aqueous solution.

EC (67/548 or 1999/45): T;R25

CLP (1272/2008): Acute Tox. 4;H302

Label elements:

Contents: Sodium Nitrite



Warning

H302: Harmful if swallowed.

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Other hazards: None known.

PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

3. Composition/information on ingredients**Substances:**

% w/w	Substance name	CAS-no.	EC-no.	Index-no.	REACH reg.-no.	Classification
10-20	Sodium nitrite	7632-00-0	231-555-9	007-010-00-4	-	EC: O;R8 T;R25 N;R50 (M=1) CLP: Ox. Sol. 3;H272 Acute Tox. 3;H301 Aquatic Acute 1;H400 (M=1)

Wording of hazard statements - see section 16.

4. First aid measures**Description of first aid measures:**

Inhalation: Move to fresh air. Keep at rest. If needed: seek medical advice.

Skin contact: Remove contaminated clothing and wash skin with water and mild soap. If irritation persists: Seek medical advice.

Eye contact: Immediately flush with water or physiological salt water for at least 15 minutes, holding eye lids open, remember to remove contact lenses, if any. If irritation persists: seek medical advice. Continue to flush on the way.

Ingestion: Rinse mouth and drink plenty of water. Keep at rest. In case of discomfort: Seek medical advice.

Most important symptoms and effects, both acute and delayed:

Irritation of eyes. Ingestion may cause depressed respiration, narcosis, nausea, vomiting, collapse, headache, unconsciousness and cyanosis.

Indication of any immediate medical attention and special treatment needed:

Show this safety data sheet to a physician or emergency ward. Laxative: Sodium sulphate (1 tablespoon/0.25 l water).

5. Firefighting measures

Not combustible.

Extinguishing media:

Use carbon dioxide or dry chemical.

Special hazards arising from the substance or mixture:

Do not inhale smoke fumes. In case of fire, the substance may form hazardous decomposition products: Oxides of nitrogen.

Advice for firefighters:

Remove containers if this is possible without personal risk. Wear self contained breathing apparatus when generation of smoke is vigorous.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment - see section 8. Avoid further spreading. Ventilate area of leak or spill.

Environmental precautions:

Do not empty into drains - see section 12. Inform appropriate authorities in accordance with local regulations.

Methods and material for containment and cleaning up:

Absorb with paper towels or granulate. Place in suitable container for disposal. Flush with water. Further handling of spillage - see section 13.

Reference to other sections:

See above.

7. Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Change contaminated clothes. Wash contaminated skin immediately.

Conditions for safe storage, including any incompatibilities:

Store in tightly closed original container. Keep in a cool, dry, well ventilated place.

Specific end use(s):

See section 1.

8. Exposure controls/Personal protection

Control parameters:

Occupational exposure limits (EH40/2007): None

DNEL/PNEC: No CSR.

Exposure controls:

Appropriate engineering controls: Provide efficient ventilation e.g. by working in a fume cupboard.

Personal protective equipment:

Respiratory protection: Normally not necessary.

Skin protection: Wear protective gloves of e.g. nitrile (0.11 mm). Breakthrough time: Approximately 3 hours.

Eye protection: Use safety goggles when there is a risk of splashes.

Environmental exposure controls: None particular.

9. Physical and chemical properties

Information on basic physical and chemical properties:

Appearance:	Colourless liquid
Odour:	None
pH:	~ 9
Melting point / freezing point (°C):	~ 0
Initial boiling point and boiling range (°C):	~ 100
Decomposition temperature (°C):	No available data
Flash point (°C):	No available data
Evaporation rate:	No available data
Flammability (solid, gas):	Not relevant
Upper/lower flammability or explosive limits (vol-%):	No available data
Vapour pressure (hPa, 25°C):	23
Relative density (g/ml):	1.08
Solubility:	Soluble in water
Partition coefficient: n-octanol/water, Log K _{ow} :	-3.7 (OECD 107)
Viscosity:	Not relevant
Explosive properties:	Not relevant
Oxidising properties:	Not oxidizing (10-20%)
Other information:	None

10. Stability and reactivity

Reactivity:

No available data.

Chemical stability:

Stable under normal conditions (see section 7). Not combustible.

Possibility of hazardous reactions:

None known.

Conditions to avoid:

Strong heating.

Incompatible materials:

Sodium nitrite may react/form toxic gas with acids, combustible substances, phenol, aluminium, sulphides, inorganic cyanides, urea, hydrazine, chlorates, permanganates, 1.3-butadien, strong reducing agents, metal powders, amines, nitrosamines, unsaturated hydrocarbons, ethylene oxide.

Hazardous decomposition products:

In case of fire, the substance may form hazardous decomposition products such as oxides of nitrogen.

11. Toxicological information

Information on toxicological effects:

Hazard class	Data (Sodium nitrite)	Test	Data source
Acute toxicity:			
Inhalation	LC ₅₀ (rat) = 5.5 mg/l/4H	No info.	RTECS
Dermal	No available data	-	-
Oral	LD ₅₀ (rat) = 85 mg/kg	No info.	IUCLID
Corrosion/irritation:	Slight irritation of skin/eye	OECD 405/404	IUCLID
Sensitization:	No available applicable data.	-	-
CMR:	No carcinogenicity, mutagenicity or reproductive toxicity	No info.	IUCLID

Information on likely routes of exposure: Inhalation, skin and ingestion.

Symptoms:

Inhalation: Vapours may cause irritation to the airways. May cause symptoms mentioned for "Ingestion".

Skin: May cause irritation with redness. Degreases skin.

Eyes: May cause irritation with redness, pain and blurred vision.

Ingestion: May irritate the mucous membranes. May induce discomfort, nausea, dizziness and headache. Large amounts may cause narcosis, unconsciousness, cyanosis, methaemoglobinemia.

Chronic effects: Prolonged or frequent exposure to diluted solutions may cause dermatitis.

Possibility of formation of nitrosamines. Nitrosamines are carcinogenic in animal studies.

12. Ecological information

Toxicity:

Aquatic	Data (Sodium nitrite)	Test (Media)	Reference
Fish	LC ₅₀ (Oncorhynchus mykiss, 96 h) = 0.09-0.13 mg/l	No info (FW)	ECOTOX
Crustacean	EC ₅₀ (Daphnia magna, 48 h) = 66 mg/l	OECD 202	IUCLID
Algae	No applicable/available data	-	-

Persistence and degradability:

Biodegradability testing does not apply to inorganic substances.

Bioaccumulative potential:

Log K_{ow} = -3.7 (bioaccumulation is not expected).

Mobility in soil:

No available data.

Results of PBT and vPvB assessment:

No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

Other adverse effects:

None known.

13. Disposal considerations

Waste treatment methods:

The substance is to be considered as hazardous waste.

Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-code:

16 05 07

14. Transport information

Not dangerous goods (ADR/IMDG).

UN-no.: UN proper shipping name:

-

Transport hazard class(es):

-

Packing group:

-

Environmental hazards: None.

Special precautions for user: None.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not relevant.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work:

Must not be used by persons under 18 years of age.

Chemical Safety Assessment:

No CSR.

16. Other information

Hazard statements mentioned in section 2 and 3:

R 8: Contact with combustible material may cause fire.

R 25: Toxic if swallowed.

R 50: Very toxic to aquatic organisms.

H272: May intensify fire; oxidiser.

H301: Toxic if swallowed.

H302: Harmful if swallowed.

H400: Very toxic to aquatic life.

Label elements (1999/45/EC):



Toxic

R 25: Toxic if swallowed.

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50 %

FW = Fresh Water

LC₅₀ = Lethal Concentration 50 %

LD₅₀ = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

EPA Ecotox = The US Environmental Protection Agency's database on ecotoxicological effects for chemicals.

IUCLID = International Uniform Chemical Information Database.

RTECS = Register of Toxic Effects of Chemical Substances.

Training advice:

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Changes since the previous edition:

Not relevant.

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