

Sodium nitrite

31443-1KG

Version 2.0

Issuing date 11/08/2016

Revision Date 06/03/2022

Print Date 06/05/2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name : Sodium nitrite

Number : 000000020901

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH
Wunstorfer Straße 40
Seelze, 30926
Germany

For further information, please contact: : 1-800-368-0050
+1-231-726-3171
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**
In Japan: +(81)-345209637

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture**

Classification of the substance or mixture : **Oxidizing solids, Category 3**
Acute toxicity, Category 3, Oral
Eye irritation, Category 2
Short-term (acute) aquatic hazard, Category 1

GHS Label elements, including precautionary statements

Symbol(s) :



Signal word :

Danger

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

Precautionary statements : **Prevention:**
Keep away from heat.
Keep/ Store away from clothing/ combustible materials.
Take any precaution to avoid mixing with combustibles.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.
IF IN EYES: 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.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Collect spillage.

Storage:
Store locked up.

Disposal:
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTSFormula : NaNO₂

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Sodium nitrite	7632-00-0	100.00 %
Sodium nitrite		

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4. FIRST AID MEASURES

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|--------------------|--|
| General advice | : First aider needs to protect himself.
Move out of dangerous area.
Take off all contaminated clothing immediately. |
| Inhalation | : If breathed in, move person into fresh air.
If symptoms persist, call a physician. |
| Skin contact | : After contact with skin, wash immediately with plenty of water.
If symptoms persist, call a physician. |
| Eye contact | : Rinse thoroughly with plenty of water, also under the eyelids.
Protect unharmed eye.
If eye irritation persists, consult a specialist. |
| Ingestion | : When swallowed, allow water to be drunk.
Call a physician immediately. |
| Notes to physician | : May cause cyanosis.
May cause methemoglobinemia.
Treat symptomatically. |

5. FIREFIGHTING MEASURES

- | | |
|---|---|
| Suitable extinguishing media | : Water spray
Foam
Carbon dioxide (CO ₂)
Dry powder |
| Specific hazards during firefighting | : May intensify fire; oxidizer.
In fires, the product supports combustion.
In case of fire hazardous decomposition products may be produced such as:
Sodium oxides
Nitrogen oxides (NO _x) |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus and protective suit. |
| Further information | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |

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6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions,
protective equipment and
emergency procedures | : Wear personal protective equipment.
Evacuate personnel to safe areas.
Ensure adequate ventilation.
Avoid dust formation.
Do not swallow.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing. |
| Environmental precautions | : Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system. |
| Methods and materials for
containment and cleaning up | : Use mechanical handling equipment.
Sweep up and shovel into suitable containers for disposal.
Do not pick up with the help of saw-dust or other combustible
substances.
Dispose of in accordance with local regulations. |

7. HANDLING AND STORAGE**Handling**

- | | |
|--|--|
| Precautions for safe handling | : Wear personal protective equipment.
Use only in well-ventilated areas.
Avoid dust formation.
Wash thoroughly after handling.
Do not swallow.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing. |
| Advice on protection against
fire and explosion | : Keep away from easily oxidizable materials.
Keep away from combustible material. |

Storage

- | | |
|--|---|
| Conditions for safe storage,
including any
incompatibilities | : Store in original container.
Keep container tightly closed in a dry and well-ventilated
place. |
| Advice on common storage | : Do not store with combustible materials.
Keep away from reducing agents.
Do not store near acids. |

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Appropriate engineering controls

Local exhaust

Individual protection measures, such as personal protective equipment

- | | |
|--------------------------|--|
| Respiratory protection | : In case of insufficient ventilation, wear suitable respiratory equipment. |
| Hand protection | : Latex gloves
Gloves must be inspected prior to use.
Replace when worn. |
| Eye protection | : Safety goggles |
| Skin and body protection | : Protective suit |
| Hygiene measures | : Keep working clothes separately.
Wash hands before breaks and at the end of workday.
Separate rooms are required for washing, showering and changing clothes. |
| Protective measures | : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing. |

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|----------------|---------------------------|
| Physical state | : crystalline |
| Colour | : colourless to yellowish |
| Odour | : odourless |

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Odour Threshold	: Note: No data available
pH	: 8 - 9 at 100.00 g/l, 20 °C
Melting point/range	: 280 °C
Boiling point/boiling range	: Note: No data available
Flash point	: Note: Not applicable
Evaporation rate	: Note: No data available
Flammability	: The product is not flammable.
Lower explosion limit	: Note: No data available
Upper explosion limit	: Note: No data available
Vapour pressure	: Note: No data available
Vapour density	: Note: No data available
Density	: ca. 2.17 g/cm ³ at 20 °C
Water solubility	: 820 g/l at 20 °C
Partition coefficient: n-octanol/water	: log Pow: -3.7 at 25 °C
Ignition temperature	: Note: Not applicable
Decomposition temperature	: > 320 °C Note: Decomposition temperature
Viscosity, dynamic	: Note: No data available
Viscosity, kinematic	: Note: No data available

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Molecular weight : 69 g/mol
Bulk density : ca. 1,100 - 1,300 kg/m³

10. STABILITY AND REACTIVITY

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Exothermic reaction with strong acids.

Conditions to avoid : Keep away from reducing agents.
Avoid contact with combustible material (paper, wool, oil).
Avoid dust formation.
Protect from heat/overheating.

Incompatible materials to avoid : Combustible material
Acids
Reducing agents
Metals
Amines
Ammonium salts
As oxidising agent, attacks organic substances such as wood, paper, fats.

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
Sodium oxides
Nitrogen oxides (NO_x)

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact, Ingestion

Acute oral toxicity : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Acute inhalation toxicity : Note: Not classified due to data which are conclusive although insufficient for classification.

Acute dermal toxicity : Note: No data available

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Skin corrosion/irritation	: Note: No data available
Serious eye damage/eye irritation	: Note: No data available
Respiratory or skin sensitisation	: Note: No data available
Repeated dose toxicity	: Species: Rat, male and female Application Route: Drinking Water Study Exposure time: 14 Weeks NOAEL (No observed adverse effect level): not obtained LOAEL (Lowest observed adverse effect level): 115 - 225 mg/kg/d
Germ cell mutagenicity	: Note: Not classified due to data which are conclusive although insufficient for classification.
Carcinogenicity	: Note: Not classified due to data which are conclusive although insufficient for classification.
Further information	: Note: May cause cyanosis. May cause methemoglobinemia.

12. ECOLOGICAL INFORMATION

Aquatic and ecotoxicity

Toxicity to fish	: flow-through test LC50: 0.54 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout)
	: NOEC: 21 mg/l Exposure time: 29 d Species: Cyprinus carpio (Carp) Method: OECD Test Guideline 210

Toxicity to daphnia and other	: static test
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aquatic invertebrates

LC50: 15.4 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202

Toxicity to algae

: static test
ErC50: > 100 mg/l
Exposure time: 72 h
Species: Desmodesmus subspicatus (green algae)
Method: OECD Test Guideline 201

Toxicity to bacteria

: EC10: 210 mg/l
Exposure time: 180 min
Species: activated sludge
Method: OECD Test Guideline 209

Persistence and degradability

Other adverse effects

Additional ecological information : Do not flush into surface water or sanitary sewer system.

13. DISPOSAL CONSIDERATIONS

Disposal methods : In accordance with local and national regulations.

14. TRANSPORT INFORMATION

ADR

UN/ID No. : UN 1500
Description of the goods : SODIUM NITRITE

Class : 5.1
Packing group : III
Classification Code : OT2

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Hazard Identification Number : 56
Labels : 5.1 (6.1)

IATA

UN/ID No. : UN 1500
Description of the goods : Sodium nitrite
Class : 5.1
Packing group : III
Labels : 5.1 (6.1)
Packing instruction (cargo aircraft) : 563
Packing instruction (passenger aircraft) : 559
Packing instruction (passenger aircraft) : Y546

IMDG

UN/ID No. : UN 1500
Description of the goods : SODIUM NITRITE
Class : 5.1
Packing group : III
Labels : 5.1 (6.1)
EmS Number 1 : F-A
EmS Number 2 : S-Q

Marine pollutant : yes

15. REGULATORY INFORMATION**National regulatory information**

Vessel Safety Law : Oxidizing substances and organic peroxides (Article 2 and 3 of JP VSL rules on shipping and storage of dangerous goods and its Attached Table 1)

Aviation Law : Oxidizing substances and organic peroxides (Article 194 of The JP AVL Enforcement Rules of Aviation Law and its Attached Table 1)

Fire Service Law : Group 1 Oxidizing solids

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Nitrites
Hazardous rank I
Be careful with fire and shock

Poisonous and Deleterious
Substances Control Law : Deleterious substance not for pharmaceutical use
2
Listed
Sodium nitrite 7632-00-0

Other international regulations**Notification status**

US. Toxic Substances
Control Act : On TSCA Inventory

Australia. Industrial
Chemicals Act (AIC), as
amended : On the inventory, or in compliance with the inventory

Canada. Canadian
Environmental Protection Act
(CEPA). Domestic
Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals
Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. Inventory of
Chemicals and Chemical
Substances (PICCS) : On the inventory, or in compliance with the inventory

China. Inventory of Existing
Chemical Substances
(IECSC) : On the inventory, or in compliance with the inventory

New Zealand. Inventory of
Chemicals (NZIoC), as
published by ERMA New
Zealand : On the inventory, or in compliance with the inventory

Taiwan Chemical Substance : On the inventory, or in compliance with the inventory

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Inventory (TCSI)

16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 2*	2
Flammability	: 0	0
Physical Hazard	: 1	
Instability	:	1
Special hazard	:	OX

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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