

## Sodium nitrite

31443-1KG

Version 2.0

Revision Date 14.06.2022

Supersedes 1

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

#### 1.1. Product identifier

Product name : Sodium nitrite  
SDS-number : 000000020901  
Type of product : Substance  
Remarks : SDS according to Art. 31 of Regulation (EC) 1907/2006.  
Chemical name : sodium nitrite  
Index-No. : 007-010-00-4  
REACH Registration Number : no data available

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

Use of the Substance/Mixture : Laboratory chemicals  
Uses advised against : none

#### 1.3. Details of the supplier of the safety data sheet

Company	: Honeywell International Inc. 115 Tabor Road 07950-2546 Morris Plains USA	Honeywell International, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
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Telephone :  
For further information, please contact: : [SafetyDataSheet@Honeywell.com](mailto:SafetyDataSheet@Honeywell.com)

#### 1.4. Emergency telephone number

Emergency telephone number : +1-703-527-3887 (ChemTrec-Transport)  
+1-303-389-1414 (Medical)  
Country based Poison : see chapter 15.1

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Control Center

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### REGULATION (EC) No 1272/2008

Oxidizing solids Category 3  
H272 May intensify fire; oxidizer.  
Acute toxicity Category 3 - Oral  
H301 Toxic if swallowed.  
Short-term (acute) aquatic hazard Category 1  
H400 Very toxic to aquatic life.

Eye irritation Category 2A  
H319 Causes serious eye irritation.

#### 2.2. Label elements

##### REGULATION (EC) No 1272/2008

Hazard pictograms



Signal word : **Danger**

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

Precautionary statements : P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ eye protection/ face protection.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

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### 2.3. Other hazards

Contact with combustible material may cause fire.  
Results of PBT and vPvB assessment, see chapter 12.5.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
sodium nitrite	7632-00-0 007-010-00-4 231-555-9	Ox. Sol. 3; H272 Acute Tox. 3; H301; Oral Aquatic Acute 1; H400 Eye Irrit. 2A; H319	100 %	

### 3.2. Mixture

Not applicable

Occupational Exposure Limit(s), if available, are listed in Section 8.  
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:*

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:*

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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.

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

No data available

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

No data available

See Section 11 for more detailed information on health effects and symptoms. :

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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

*Suitable extinguishing media:*

Water spray

Foam

Carbon dioxide (CO<sub>2</sub>)

Dry powder

*Extinguishing media which shall not be used for safety reasons:*

High volume water jet

### 5.2. Special hazards arising from the substance or mixture

In fires, the product supports combustion.

The product itself does not burn.

Fire may cause evolution of:

Nitrogen oxides (NO<sub>x</sub>)

Keep away from reducing agents.

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### 5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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## SECTION 6: Accidental release measures

### 6.1. 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.

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

### 6.3. Methods and materials for containment and cleaning up

Use mechanical handling equipment.  
Pick for disposal in tightly closed containers  
Avoid dust formation.  
Do not pick up with the help of saw-dust or other combustible substances.

### 6.4. Reference to other sections

For personal protection see section 8.

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### *Advice on 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.

#### *Hygiene measures:*

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Keep working clothes separately. Wash hands before breaks and at the end of workday. Separate rooms are required for washing, showering and changing clothes.

### 7.2. Conditions for safe storage, including any incompatibilities

*Further information on storage conditions:*

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

*Advice on common storage:*

Do not store with combustible materials.

### 7.3. Specific end use(s)

no additional data available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
sodium nitrite	Workers / Long-term systemic effects		2 mg/m3	Inhalation	
sodium nitrite	Workers / Acute systemic effects		2 mg/m3	Inhalation	

Component	Environmental compartment / Value	Remarks
sodium nitrite	Fresh water: 0,0054 mg/l	Assessment factor:

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		100
sodium nitrite	Marine water: 0,00616 mg/l	Assessment factor: 1000
sodium nitrite	Sewage treatment plant: 21 mg/l	Assessment factor: 10
sodium nitrite	Fresh water sediment: 0,0195 mg/kg dw	
sodium nitrite	Marine sediment: 0,0223 mg/kg dw	
sodium nitrite	Soil: 0,000733 mg/kg dw	

### 8.2. Exposure controls

#### Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

#### Engineering measures

Local exhaust

#### Personal protective equipment

##### *Respiratory protection:*

In the case of dust or aerosol formation use respirator with an approved filter.

##### *Hand protection:*

Glove material: Natural Latex

Break through time: > 480 min

Glove thickness: 0,6 mm

Lapren®706

Gloves must be inspected prior to use.

Replace when worn.

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Remarks: Supplementary note: The specifications are based on information and tests from similar substances by analogy.  
Due to varying conditions ( e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.  
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer recommends to use the chemical protective glove in practice not longer than 50% of the recommended permeation time.  
Manufacturer's directions for use should be observed because of great diversity of types .  
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

*Eye protection:*  
Safety goggles

*Skin and body protection:*  
Protective suit

### Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: solid
Colour	: colourless to yellowish
Odour	: odourless
molecular weight	: 69 g/mol
Melting point/range	: 280 °C
Boiling point/boiling range	: No data available
Flammability	: The product is not flammable.
Upper explosion limit	: No data available



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Lower explosion limit	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	320 °C Decomposition temperature
pH	:	8 - 9 Concentration: 100 g/l at 20 °C
Viscosity, kinematic	:	No data available
Water solubility	:	820 g/l at 20 °C
Partition coefficient: n-octanol/water	:	log Pow -3,7 at: 25 °C
Vapour pressure	:	No data available
Density	:	ca. 2,17 g/cm <sup>3</sup> at 20 °C
Bulk density	:	ca. 1.100 - 1.300 kg/m <sup>3</sup>
Relative vapour density	:	No data available

### 9.2 Other Information

The product is hygroscopic. Evaporation rate	:	No data available
Viscosity, dynamic	:	No data available

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Stable under recommended storage conditions.

#### 10.2. Chemical stability

>320 °C  
Decomposition temperature

#### 10.3. Possibility of hazardous reactions

Exothermic reaction with strong acids.

#### 10.4. Conditions to avoid

Protect from heat/overheating.

#### 10.5. Incompatible materials

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

#### 10.6. Hazardous decomposition products

Nitrogen oxides (NO<sub>x</sub>)

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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

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

*Acute dermal toxicity:*  
No data available

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*Acute inhalation toxicity:*

Not classified due to data which are conclusive although insufficient for classification.

*Skin irritation:*

No data available

*Eye irritation:*

No data available

*Respiratory or skin sensitisation:*

No data available

*Carcinogenicity:*

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

*Germ cell mutagenicity:*

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

*Reproductive toxicity:*

Remarks: Not classified due to data which are conclusive although insufficient for classification.

*Aspiration hazard:*

No data available

### 11.2. Information on other hazards

Endocrine disrupting properties

No data available

*Other information:*

No data available

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## SECTION 12: Ecological information

### 12.1. Toxicity

*Toxicity to fish:*

LC50

flow-through test

Species: *Oncorhynchus mykiss* (rainbow trout)

Value: 0,54 mg/l

Exposure time: 96 h

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### NOEC

Species: Cyprinus carpio (Carp)

Value: 21 mg/l

Exposure time: 29 d

Method: OECD Test Guideline 210

### *Toxicity to aquatic plants:*

ErC50

static test

Species: Desmodesmus subspicatus (green algae)

Value: > 100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

### *Toxicity to Microorganisms:*

EC10

Species: activated sludge

Value: 210 mg/l

Exposure time: 180 min

Method: OECD Test Guideline 209

### *Toxicity to aquatic invertebrates:*

LC50

static test

Species: Daphnia magna (Water flea)

Value: 15,4 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

## 12.2. Persistence and degradability

### *Biodegradability:*

The methods for determining biodegradability are not applicable to inorganic substances.

## 12.3. Bioaccumulative potential

No data available

## 12.4. Mobility in soil

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No data available

### 12.5. Results of PBT and vPvB assessment

No data available

### 12.6. Endocrine disrupting properties

No data available

### 12.7. Other adverse effects

Do not flush into surface water or sanitary sewer system.

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

*Product:*

Dispose according to legal requirements.

*Packaging:*

Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

*Further information:*

Provisions relating to waste:

EC Directive 2006/12/EC; 2008/98/EEC

Regulation No. 1013/2006

For personal protection see section 8.

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## 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: 5.1 (6.1)

IATA: 5.1 (6.1)

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**14.4 Packaging group**

ADR/RID: III

IMDG: III

IATA: III

**14.5 Environmental hazards**

ADR/RID: yes

Marine pollutant: yes

**14.6 Special precautions for user**

No data available

**14.7 Maritime transport in bulk according to IMO instruments**

No data available

**SECTION 15: Regulatory information**

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

Basis	Value	Remarks
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of $\geq 0.1\%$ (w/w).
Directive 2012/18/EC SEVESO III Listed in Regulation : Oxidising Liquids, Category 1, 2 or 3, or; Oxidising Solids, Category 1, 2 or 3	<b>Quantity:</b> 50.000 kg <b>Quantity:</b> 200.000 kg	

**Poison Control Center**

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+)35929154233
Croatia	(+3851)23-48-342

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000

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Cyprus	+357 2240 5611
Czech Republic	+420224919293; +420224915402
Denmark	82121212
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166
Italy	0382 24444
Germany	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt : 0361/730730
	Freiburg : 0761/19240
	Göttingen : 0551/19240
	Homburg : 06841/19240
	Mainz : 06131/19240
Munich : 089/19240	
Latvia	+37167042473

Netherlands	030-2748888
Norway	22591300
Poland	+48 42 25 38 400
Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420
Sweden	112 (begär Giftinformation);+46104566786
Switzerland	145
United Kingdom	(+44) 844 892 0111

**Other inventory information**

US. Toxic Substances Control Act  
On TSCA Inventory

Australia. Industrial Chemicals Act (AICC), 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  
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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 Inventory (TCSI)

On the inventory, or in compliance with the inventory

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

### Text of H-statements referred to under heading 3

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

### Further information

All directives and regulations refer to amended versions.

Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:

EC European Community

CAS Chemical Abstracts Service

DNEL Derived no effect level

PNEC Predicted no effect level



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vPvB Very persistent and very bioaccumulative substance  
PBT Persistent, bioaccumulative und toxic substance

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