



### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifiers

Product name : Sodium Nitrite Solution  
Product Number : PN000167, PN002245  
CAS-No. : 7632-00-0

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

Identified uses : Laboratory chemical/reagent

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

Company : Associates of Cape Cod, Inc.  
124 Bernard E St Jean Drive  
East Falmouth, MA 02536  
USA

Telephone : +1 888-395-2221  
: +1 508-540-3444

#### 1.4 Emergency telephone number

Emergency Phone Number : (800) 424-9300 Chemtrec® Domestic North America  
: (703) 527-3887 Chemtrec® International

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Carcinogenicity (Category 1B), containing sodium nitrite at  $\geq 0.1\%$  as a probable carcinogen

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

##### Hazard statement(s)

- Probably carcinogenic to humans
- Very toxic to aquatic life.

##### Precautionary statement(s)

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- 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.
- 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 exposed or concerned: Get medical advice/ attention.



- If eye irritation persists: Get medical advice/ attention.
- Collect spillage. Dispose of contents/ container to an approved waste disposal plant.
- Store locked up.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Formula: NNaO2

Molecular weight: 69.00 g/mol

CAS-No.: 7632-00-0

| Component      | Classification             | Concentration |
|----------------|----------------------------|---------------|
| Sodium nitrite | Carc. 1B; Aquatic Acute 1; | <= 0-1 %      |

## 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. Move out of dangerous area.

#### 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. Take victim immediately to hospital. 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

## 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

No data available

### 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.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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

Contain spillage, and then collect 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.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

For precautions see section 2.2.

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

Keep container tightly closed in a well-ventilated place.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure Guidelines

Contains no substances with occupational exposure limit values.

### 8.2 Exposure 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.



Full contact  
Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm

Splash contact  
Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### 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 a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

|   |                                  |
|---|----------------------------------|
| a) Appearance                                   | Form: liquid                     |
| b) Odor   | odorless                         |
| c) Odor Threshold                               | No data available                |
| d) pH   | No data available                |
| e) Melting point/freezing point                 | Not applicable                   |
| f) Initial boiling point and boiling range      | No data available                |
| 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) Vapor pressure                               | No data available                |
| l) Vapor density                                | No data available                |
| m) Relative density                             | No data available                |
| n) Water solubility                             | 820 g/l at 20 °C (68 °F)         |
| o) Partition coefficient: n- octanol/water      | log Pow: -3.699 at 25 °C (77 °F) |
| 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                         | No data available                |

### 9.2 Other safety information

No data available



### 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

#### 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Symptoms

Headache, Nausea, Incoordination; Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### 11.2 Information on toxicological effects

##### Acute toxicity

LD50 Oral - Rat - 157.9 mg/kg

LD50 Oral - Mouse - 175 mg/kg

Remarks: Vascular: BP lowering not characterized in autonomic section. Vascular: Regional or general arteriolar or venous dilation.

##### Inhalation:

No data available

##### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 48 h

(OECD Test Guideline 404)

##### Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation - 24 h

(OECD Test Guideline 405)

##### Respiratory or skin sensitization

No data available

##### Germ cell mutagenicity

No data available



### Carcinogenicity

IARC: 2A - Group 2A: Probably carcinogenic to humans (Sodium nitrite)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

No data available

### Specific target organ toxicity - single exposure

No data available

### Specific target organ toxicity - repeated exposure

No data available

### Aspiration hazard

No data available

### Additional Information

RTECS: RA1225000

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Headache, Nausea, Incoordination; Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

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Liver - Irregularities - Based on Human Evidence

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity (Component Information)

Toxicity to fish                      flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 0.94 - 1.92 mg/l - 96.0 h mortality  
NOEC - Oncorhynchus mykiss (rainbow trout) - 0.54 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates  
EC50 - Daphnia magna (Water flea) - 12.5 mg/l - 48 h

Toxicity to algae                      NOEC - Desmodesmus subspicatus (green algae) - 100 mg/l - 72 h (OECD Test Guideline 201)

### 12.2 Persistence and degradability

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



## SAFETY DATA SHEET

Version 12

Revision Date 22 May 2017

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

#### DOT (US)

Not dangerous goods

#### IMDG

Not dangerous goods

#### IATA

Not dangerous goods

## 15. REGULATORY INFORMATION

#### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Sodium nitrite

CAS-No.  
7632-00-0

Revision Date  
2007-07-01

#### SARA 311/312 Hazards

Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

#### Massachusetts Right To Know Components

Sodium nitrite

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Revision Date  
2007-07-01



## SAFETY DATA SHEET

Version 12

Revision Date 22 May 2017

### Pennsylvania Right To Know Components

Sodium nitrite

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7632-00-0

Revision Date  
2007-07-01

### New Jersey Right To Know Components

Sodium nitrite

CAS-No.  
7632-00-0

Revision Date  
2007-07-01

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

### HMIS Rating

Health hazard: 2  
Flammability: 0  
Physical Hazard 1

### NFPA Rating

Health hazard: 2  
Fire Hazard: 0  
Reactivity Hazard: 1

### Further information

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### Preparation Information

Associates of Cape Cod, Inc.

Version: 12

SDS *Sodium Nitrite*