

Material Safety Data Sheet

Material Name: Sodium Nitrite Injection

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information

Hope Pharmaceuticals
16416 N. 92nd Street #125
Scottsdale, AZ 85260

Phone: 480-607-1970
Fax: 480-607-1971

*** Section 2 - Hazards Identification ***

Emergency Overview

May cause ocular and dermal irritation if direct exposure occurs. Excessive doses of sodium nitrite induces dangerous methemoglobinemia and can cause death.

Potential Health Effects: Eyes

May cause ocular irritation from direct exposure.

Potential Health Effects: Skin

May cause dermal irritation from direct exposure. The amount of sodium nitrite contained in a vial of Sodium Nitrite Injection is generally suitable for the treatment of adults as directed in the product prescribing information. The doses for children should be calculated on a surface area or on a weight basis with dosage adjusted so that excessive methemoglobin is not formed. Symptoms of excessive methemoglobinemia are blue skin and mucous membranes, vomiting shock and coma.

Potential Health Effects: Ingestion

Not anticipated under normal product use.

Potential Health Effects: Inhalation

Not anticipated under normal product use.

HMIS Ratings: Health: 1 Fire: 0 HMIS Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Content Per mL
7732-18-5	Water	<1.0 ml
7632-00-0	Sodium nitrite	30 mg

*** Section 4 - First Aid Measures ***

First Aid: Eyes

In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. See an ophthalmologist (eye doctor) or physician immediately.

First Aid: Skin

Remove contaminated clothing and clean before reuse. Wash all exposed areas of skin with plenty of soap and water. Get medical attention if irritation develops or persists.

First Aid: Ingestion

Do not induce vomiting. Call a physician or poison control center. If available, administer activated charcoal (6-8 teaspoonfuls) with two to three glasses of water. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician.

First Aid: Inhalation

Move individual to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, provide artificial respiration assistance and call a physician immediately.

First Aid: Notes to Physician

If substantial ingestion occurs and methemoglobinemia results, administer oxygen. A 1% methylene blue solution should be given intravenously for treatment of excessive methemoglobinemia. Transfusion of whole fresh blood should be considered.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.

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None known.

Hazardous Combustion Products

May emit toxic fumes when heated to decomposition.

Extinguishing Media

Use water, CO₂, dry chemical, foam or Halon.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Containment Procedures

Contain the discharged material.

Clean-Up Procedures

Prevent further migration into the environment. Use absorbent/adsorbent material to solidify liquids. Solidification may not suppress vapors. Vacuuming liquids or solidified material may disperse vapors. Wear protective equipment, including eye protection, to avoid exposure.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Follow all Local, State, Federal and Provincial regulations for disposal.

* * * Section 7 - Handling and Storage * * *

Handling Procedures

No special handling procedures necessary.

Storage Procedures

No special storage procedures needed.

* * * Section 8 - Exposure Controls / Personal Protection * * *

A: Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

Engineering Controls

Use laboratory fume hood and adequate local ventilation when handling.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin

Use impervious gloves and body covering to prevent skin contact.

Personal Protective Equipment: Respiratory

Not normally required.

Personal Protective Equipment: General

Eye wash fountain is recommended.

* * * Section 9 - Physical & Chemical Properties * * *

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Appearance:	Clear, colorless to slightly yellow	Odor:	None
Physical State:	Aqueous solution	pH:	7.0-9.0
Vapor Pressure:	NA	Vapor Density:	NA
Boiling Point:	102°-104°C	Melting Point:	NA
Solubility (H2O):	Miscible	Specific Gravity:	NA
Evaporation Rate:	NA	VOC:	ND
Octanol/H2O Coeff.:	ND	Flash Point:	NA
Flash Point Method:	NA	Upper Flammability Limit (UFL):	NA
Lower Flammability Limit (LFL):	NA	Burning Rate:	NA
Auto Ignition:	NA		

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

None

Incompatibility

Hazardous reaction can occur with acids, ammonia compounds, reducing agents particularly cyanides, thiocyanides, and organics.

Hazardous Decomposition

May emit toxic fumes when heated to decomposition.

Possibility of Hazardous Polymerization

Does not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Water (7732-18-5)

Oral LD50 Rat: >90 mL/kg

Sodium nitrite (7632-00-0)

Inhalation LC50 Rat: 5.5 mg/L/4H; Oral LD50 Rat: 85 mg/kg

Carcinogenicity

A: General Product Information

While not direct carcinogens, nitrates and nitrites are nitrosation compounds that in the stomach could contribute to the formation of nitrosamines. Nitrosamines are animal carcinogens. However, it is estimated that in our daily diet we safely ingest approximately 10 mg of nitrite.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Mutagenicity

Positive in bacterial cells and negative in mammalian cells.

Target Organ Effects

Methemoglobin former, skin/appendage, liver and gastrointestinal tumors.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

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B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Sodium nitrite (7632-00-0)

Test & Species

96 Hr LC50 Oncorhynchus mykiss

0.19 mg/L [flow-through]

Conditions

juvenile

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not Regulated

*** Section 15 - Regulatory Information ***

US Federal Regulations

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Sodium nitrite (7632-00-0)

SARA 313: 1.0 % de minimis concentration

CERCLA: 100 lb final RQ; 45.4 kg final RQ

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Sodium nitrite	7632-00-0	Yes	Yes	No	Yes	Yes	No

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Sodium nitrite	7632-00-0	1 %

Additional Regulatory Information

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Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Water	7732-18-5	Yes	DSL	EINECS
Sodium nitrite	7632-00-0	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws. In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.