

<b>SDS Title:</b> Phenylephrine Hydrochloride Injection Safety Data Sheet	<b>SDS Number:</b> SDS-000021	<b>Page Number:</b> Page 1 of 19
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## Section 1. Identification

- GHS product identifier** : Phenylephrine Hydrochloride Injection  
**Other means of identification** : Phenylephrine Hydrochloride Injection  
**Product type** : Liquid.

**Relevant identified uses of the substance or mixture and uses advised against**

- Product use** : Pharmaceuticals (For intended use only).  
 Observe technical data sheet/instructions for use.  
 Specific Treatments: blood pressure/treat shock (Anesthesia.).

- Area of application** : Professional applications.

- Supplier's details** : Meitheal Pharmaceuticals, Inc.  
 8700 W. Bryn Mawr, Suite 600S  
 Chicago, IL 60631

Telephone: 224-443-4617  
 www.meithealpharma.com

- e-mail address of person responsible for this SDS** : info@meithealpharma.com

- Emergency telephone number (with hours of operation)** : 844-824-8426 (Monday - Friday, 08:00 - 18:00 CST)

## Section 2. Hazards identification

- OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

- Classification of the substance or mixture** : H317 SKIN SENSITIZATION - Category 1

**GHS label elements**

**Hazard pictograms** :



- Signal word** : Warning

- Hazard statements** : H317 - May cause an allergic skin reaction.

**Precautionary statements**

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## Section 2. Hazards identification

<b>Prevention</b>	: P280 - Wear protective gloves. P261 - Avoid breathing vapor. P272 - Contaminated work clothing must not be allowed out of the workplace.
<b>Response</b>	: P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P362 + P364 - Take off contaminated clothing and wash it before reuse.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazards not otherwise classified</b>	: None known.
<b>Hazards identified when used</b>	: No known significant effects or critical hazards.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Other means of identification</b>	: Phenylephrine Hydrochloride Injection

Ingredient name	Synonyms	%	Identifiers
Water	-	≥80	CAS: 7732-18-5
phenylephrine hydrochloride	-	≥0.5 - ≤1.5	CAS: 61-76-7
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, sodium salt, hydrate (1:3:2)	Sodium citrate	≥0.1 - ≤1	CAS: 6132-04-3
sodium chloride	-	≥0.1 - ≤1	CAS: 7647-14-5
sodium metabisulphite	-	≥0.1 - ≤1	CAS: 7681-57-4
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	Citric acid hydrous	≥0.1 - ≤1	CAS: 5949-29-1
Hydrogen chloride	-	≥0.1 - ≤1	CAS: 7647-01-0
sodium hydroxide	-	≥0.1 - ≤1	CAS: 1310-73-2
nitrogen	Nitrogen	≥0.1 - ≤1	CAS: 7727-37-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

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## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary



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## Section 4. First aid measures

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
halogenated compounds

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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## Section 6. Accidental release measures

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e. g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

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## Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Water	None.
phenylephrine hydrochloride	None.
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, sodium salt, hydrate (1:3:2)	None.
sodium chloride	None.
sodium metabisulphite	<b>ACGIH TLV (United States, 1/2025) A4.</b> TWA 8 hours: 5 mg/m <sup>3</sup> . <b>NIOSH REL (United States, 10/2020)</b> TWA 10 hours: 5 mg/m <sup>3</sup> . <b>CAL OSHA PEL (United States, 1/2025)</b> TWA 8 hours: 5 mg/m <sup>3</sup> .
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	None.
Hydrogen chloride	<b>ACGIH TLV (United States, 1/2025) A4.</b> C: 2 ppm. <b>NIOSH REL (United States, 10/2020)</b> CEIL: 5 ppm. CEIL: 7 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> CEIL: 5 ppm. CEIL: 7 mg/m <sup>3</sup> . <b>CAL OSHA PEL (United States, 1/2025)</b> C: 2 ppm. TWA 8 hours: 0.45 mg/m <sup>3</sup> . TWA 8 hours: 0.3 ppm.
sodium hydroxide	<b>ACGIH TLV (United States, 1/2025)</b> C: 2 mg/m <sup>3</sup> . <b>NIOSH REL (United States, 10/2020)</b> CEIL: 2 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> TWA 8 hours: 2 mg/m <sup>3</sup> . <b>CAL OSHA PEL (United States, 1/2025)</b> C: 2 mg/m <sup>3</sup> .
nitrogen	<b>ACGIH TLV (United States, 1/2025)</b> Oxygen depletion [asphyxiant].

### Biological exposure indices

None known.

### Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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## Section 8. Exposure controls/personal protection

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

- Appearance**
- Physical state** : Liquid. [Clear.]
- Color** : Colorless.
- Odor** : Odorless.
- Odor threshold** : Not available.
- pH** : 3 to 6.5
- Melting point** : Not applicable.
- Boiling point or initial boiling point and boiling range** : Not applicable.
- Flash point** : Not applicable.

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## Section 9. Physical and chemical properties

**Evaporation rate** : Not applicable.

**Flammability** : Not available.

**Lower and upper explosion limit/flammability limit** : Not applicable.

**Vapor pressure** : Not applicable.

**Relative vapor density** : Not available.

**Relative density** : Not applicable.

**Density** : Not available.

<b>Solubility(ies)</b> :	<b>Media</b>	<b>Result</b>
	water	Soluble

**Miscible with water** : Yes.

**Partition coefficient: n-octanol/water** : Not applicable.

**Auto-ignition temperature** : Not applicable.

**Decomposition temperature** : Not applicable.

**SADT** : Not available.

**Viscosity** : Dynamic (room temperature): Not applicable.  
Kinematic (room temperature): Not applicable.  
Kinematic (40°C (104°F)): Not applicable.

**Particle characteristics**

**Median particle size** : Not applicable.

**Other information**

**Physical/chemical properties comments** : No additional information.

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
Under normal conditions of storage and use, hazardous polymerization will not occur.

**Conditions to avoid** : No specific data.

**Incompatible materials** : No specific data.

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## Section 10. Stability and reactivity

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

<b>Product/ingredient name</b>	<b>Result</b>	
phenylephrine hydrochloride	<b>Rat - Oral - LD50</b> 350 mg/kg	
sodium chloride	<b>Rat - Oral - LD50</b> 3000 mg/kg	
sodium metabisulphite	<b>Rat - Oral - LD50</b> 1131 mg/kg	<u>Toxic effects:</u> Behavioral - Food intake (animal) Behavioral - Muscle weakness Other - Hair OECD [Acute Dermal Toxicity]
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	<b>Rat - Male, Female - Dermal - LD50</b> >2000 mg/kg	
Hydrogen chloride	<b>Rabbit - Dermal - LD50</b> >5010 mg/kg <b>Rat - Inhalation - LC50 Gas.</b> 1562 ppm [4 hours]	

**Conclusion/Summary [Product]** : Not available.

#### Skin corrosion/irritation

<b>Product/ingredient name</b>	<b>Result</b>
sodium chloride	<b>Rabbit - Skin - Mild irritant</b> Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg
sodium hydroxide	<b>Rabbit - Skin - Severe irritant</b> Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg

**Conclusion/Summary [Product]** : Not available.

#### Serious eye damage/eye irritation

<b>Product/ingredient name</b>	<b>Result</b>
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## Section 11. Toxicological information

sodium chloride	<b>Rabbit - Eyes - Moderate irritant</b> Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 mg
sodium metabisulphite	<b>Rabbit - Eyes - Moderate irritant</b> Amount/concentration applied: 10 mg <b>Rabbit - Eyes - Mild irritant</b> Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 mg
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	<b>Rabbit - Eyes - Mild irritant</b> Duration of treatment/exposure: 0.5 minutes Amount/concentration applied: 5 mg
Hydrogen chloride	<b>Rabbit - Eyes - Mild irritant</b> Duration of treatment/exposure: 0.5 minutes Amount/concentration applied: 5 mg
sodium hydroxide	<b>Rabbit - Eyes - Mild irritant</b> Amount/concentration applied: 400 ug <b>Rabbit - Eyes - Severe irritant</b> Duration of treatment/exposure: 24 hours Amount/concentration applied: 50 ug <b>Rabbit - Eyes - Severe irritant</b> Amount/concentration applied: 1 % <b>Rabbit - Eyes - Severe irritant</b> Duration of treatment/exposure: 24 hours Amount/concentration applied: 1 mg <b>Rabbit - Eyes - Severe irritant</b> Duration of treatment/exposure: 0.5 minutes Amount/concentration applied: 1 mg

**Conclusion/Summary [Product]** : Not available.

### Respiratory corrosion/irritation

**Conclusion/Summary [Product]** : Not available.

### Respiratory or skin sensitization

#### **Skin**

**Conclusion/Summary [Product]** : Not available.

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## Section 11. Toxicological information

### Respiratory

**Conclusion/Summary [Product]** : Not available.

### Germ cell mutagenicity

**Conclusion/Summary [Product]** : Not available.

### Carcinogenicity

**Conclusion/Summary [Product]** : Not available.

### Classification

Product/ingredient name	OSHA	IARC	NTP
sodium metabisulphite	-	3	-
Hydrogen chloride	-	3	-

### Reproductive toxicity

**Conclusion/Summary [Product]** : Not available.

### Specific target organ toxicity (single exposure)

#### Product/ingredient name

1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)  
sodium hydroxide

#### Result

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)  
(Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)  
(Respiratory tract irritation) - Category 3

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.



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## Section 11. Toxicological information

- Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : May cause an allergic skin reaction.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

- Conclusion/Summary [Product]** : Not available.

- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Reproductive toxicity** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

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## Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Phenylephrine Hydrochloride Injection	35105.0	N/A	N/A	N/A	N/A
phenylephrine hydrochloride	350	N/A	N/A	N/A	N/A
sodium chloride	3000	N/A	N/A	N/A	N/A
sodium metabisulphite	1131	N/A	N/A	N/A	N/A
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	N/A	2500	N/A	N/A	N/A
Hydrogen chloride	N/A	N/A	1562	N/A	N/A

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	
phenylephrine hydrochloride	<b>Acute - EC50 - Fresh water</b> Daphnia 4.59 mg/l [48 hours]	OECD [Daphnia sp. Acute Immobilization Test and Reproduction Test]
sodium chloride	<b>Acute - LC50 - Fresh water</b> Fish - Striped bass - <i>Morone saxatilis</i> - Larvae 1000 mg/l [96 hours]	<u>Effect</u> : Mortality
	<b>Chronic - NOEC - Fresh water</b> Daphnia - Water flea - <i>Daphnia pulex</i> 0.314 g/l [21 days]	<u>Effect</u> : Reproduction
	<b>Chronic - NOEC - Fresh water</b> Fish - Eastern mosquitofish - <i>Gambusia holbrooki</i> - Adult 100 mg/l [8 weeks]	<u>Effect</u> : Reproduction
	<b>Chronic - NOEC - Fresh water</b> Aquatic plants - Duckweed - <i>Lemna minor</i> 6 g/l [96 hours]	<u>Effect</u> : Growth OECD
	<b>Acute - EC50 - Fresh water</b> Algae - Green algae - <i>Chlamydomonas reinhardtii</i> 4.74 g/l [96 hours]	<u>Effect</u> : Population
	<b>Acute - EC50 - Fresh water</b> Daphnia - Water flea - <i>Daphnia magna</i> 402.6 mg/l [48 hours]	<u>Effect</u> : Intoxication
sodium metabisulphite	<b>Acute - LC50 - Fresh water</b> Fish - Bluegill - <i>Lepomis macrochirus</i> <u>Size</u> : 2.8 cm 32 mg/l [96 hours]	<u>Effect</u> : Mortality
Hydrogen chloride	<b>Acute - LC50 - Marine water</b>	<u>Effect</u> : Mortality

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## Section 12. Ecological information

	Crustaceans - Green crab - <i>Carcinus maenas</i> - Adult 240 mg/l [48 hours] <b>Acute - LC50 - Fresh water</b> <span style="float:right"><u>Effect:</u> Mortality</span>
	Fish - Western mosquitofish - <i>Gambusia affinis</i> - Adult 282 ppm [96 hours] <b>Acute - LC50 - Fresh water</b> <span style="float:right"><u>Effect:</u> Mortality</span>
sodium hydroxide	Fish - Western mosquitofish - <i>Gambusia affinis</i> - Adult 125 ppm [96 hours] <b>Acute - EC50 - Fresh water</b> <span style="float:right"><u>Effect:</u> Intoxication</span>
	Crustaceans - Water flea - <i>Ceriodaphnia dubia</i> - Neonate <u>Age:</u> <24 hours 40.38 mg/l [48 hours]

**Conclusion/Summary [Product]** : Not available.

### Persistence and degradability

**Conclusion/Summary [Product]** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
phenylephrine hydrochloride	-	-	Readily
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, sodium salt, hydrate (1:3:2)	-	-	Readily
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Water	-1.38	-	Low
phenylephrine hydrochloride	-0.31	-	Low
sodium metabisulphite	-3.7	-	Low
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	-1.72	-	Low
Hydrogen chloride	0.25	-	Low
nitrogen	0.67	-	Low

### Mobility in soil

**Soil/Water partition coefficient** : Not available.

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## Section 12. Ecological information

**Other adverse effects**

No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	<b>DOT Classification</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-
<b>Transport hazard class(es)</b>	-	-	-
<b>Packing group</b>	-	-	-
<b>Environmental hazards</b>	No.	No.	No.

**Additional information**

**Special precautions for user**

: **Transport within user’s premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments**

: Not available.



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## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) PAIR: sodium metabisulphite  
 TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
 United States inventory (TSCA 8b): All components are active or exempted.  
 Clean Water Act (CWA) 311: Hydrogen chloride; sodium hydroxide

**TSCA 12(b) - Chemical export notification**

Not applicable.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Hydrogen chloride	≥0.1 - ≤1	Yes.	500	-	5000	-

**SARA 304 RQ** : 5000000 lbs / 2270000 kg

**SARA 311/312**

**Classification** : SKIN SENSITIZATION - Category 1

**Composition/information on ingredients**

Name	%	Classification
phenylephrine hydrochloride	≥0.5 - ≤1.5	ACUTE TOXICITY (oral) - Category 4 SKIN SENSITIZATION - Category 1B
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, sodium salt, hydrate (1:3:2)	≥0.1 - ≤1	COMBUSTIBLE DUSTS
sodium chloride	≥0.1 - ≤1	EYE IRRITATION - Category 2A
sodium metabisulphite	≥0.1 - ≤1	ACUTE TOXICITY (oral) - Category 4 SERIOUS EYE DAMAGE - Category 1
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	≥0.1 - ≤1	EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Hydrogen chloride	≥0.1 - ≤1	GASES UNDER PRESSURE - Compressed gas



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## Section 15. Regulatory information

sodium hydroxide	≥0.1 - ≤1	ACUTE TOXICITY (inhalation) - Category 3 SKIN CORROSION - Category 1A SERIOUS EYE DAMAGE - Category 1 HNOC - Corrosive to digestive tract CORROSIVE TO METALS - Category 1 SKIN CORROSION - Category 1A SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
nitrogen	≥0.1 - ≤1	HNOC - Corrosive to digestive tract [severe] GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS

### SARA 313

Not applicable.

### State regulations

- Massachusetts** : None of the components are listed.  
**New York** : None of the components are listed.  
**New Jersey** : None of the components are listed.  
**Pennsylvania** : None of the components are listed.

### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

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## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	/	2
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

### National Fire Protection Association (U.S.A.)



### Procedure used to derive the classification

Classification	Justification
SKIN SENSITIZATION - Category 1	Calculation method

### History

- Date of issue/Date of revision** : 02/06/2026
- Date of previous issue** : 12/10/2025
- Version** : 5.0
- Prepared by** : Sphera Solutions
- Key to abbreviations** :
  - ATE = Acute Toxicity Estimate
  - BCF = Bioconcentration Factor
  - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
  - IATA = International Air Transport Association
  - IBC = Intermediate Bulk Container
  - IMDG = International Maritime Dangerous Goods
  - IMO = International Maritime Organization
  - LogPow = logarithm of the octanol/water partition coefficient
  - MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
  - N/A = Not available
  - SGG = Segregation Group
  - TDG = Transportation of Dangerous Goods
  - UN = United Nations



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## Section 16. Other information

**References** : HCS (U.S.A.)- Hazard Communication Standard  
International transport regulations

 Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.