

SAFETY DATA SHEETS

This SDS packet was issued with item:

078917014

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078391699

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078058098

MATERIAL SAFETY DATA SHEET

Section I – Product Information			
Product Name or Identity:	THIAMINE HYDROCHLORIDE 200 mg/mL, THIAMINE HYDROCHLORIDE 500 mg/mL		
Manufacturer's Name:	Neogen Corporation	Emergency Phone No.	859 254 1221
	944 Nandino Blvd.	Fax No.:	859 255 5532
	Lexington, KY 40511	e-mail:	inform@neogen.com
Date Prepared or Revised: 11/15/05			

Section II – Hazardous Ingredients / Identity Information			
Hazardous Components (Specific Chemical Identity: Common Names)	OSHA PEL (Permissible Exposure Limits)	ACGIH TLV (Threshold Limit Value)	Toxicity Data LD ₅₀
BENZYL ALCOHOL 1.5% V/V	50 ug-eye-rabbit severe irritation		1230 ug/Kg oral-rat

Section III – Physical Characteristics	
Boiling Point: NO DATA AVAILABLE	Specific Gravity (H ₂ O = 1): 1.06-1.10
Vapor Pressure (mm Hg.): NO DATA AVAILABLE	Melting Point: N/A
Vapor Density (AIR = 1): NO DATA AVAILABLE	Evaporation Rate (Butyl Acetate = 1): N/A
Solubility in Water: SOLUBLE	
Appearance and Odor: CLEAR, LIGHT YELLOW, NO VISCOUS LIQUID, FAINT ODOR OF BENZYL ALCOHOL	

Section IV – Fire and Explosion Hazard Data	
Flash Point (<i>Method Used</i>): NO DATA AVAILABLE	Flammable Limits: LEL (Lower Explosive Limit) - N/A UEL (Upper Explosive Limit) - N/A
Extinguishing Media: WATER SPRAY, CO ₂ , DRY CHEMICAL POWDER, FOAM	
Special Fire Fighting Procedures: WEAR FULL FACEPLATE AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS	
Unusual Fire and Explosion Hazards: NONE	

Section V – Reactivity Data			
Stability	Unstable		Conditions to Avoid: NONE KNOWN
	Stable	X	
Incompatibility (<i>Materials to Avoid</i>): ALKALIS AND ALKALINE DRUGS, OX IDIZING AND REDUCING AGENTS			
Hazardous Decomposition or Byproducts: SULFUR OXIDES AND NITROGEN OXIDES			
Hazardous Polymerization	May Occur		Conditions to Avoid: NONE KNOWN
	Will Not Occur	X	

Section VI – Health Hazard Data			
Route(s) of Entry:	Inhalation-Minor	Skin-Minor	Ingestion-Primary
Health Hazards (Acute and Chronic)	None known-essential nutrient		
Carcinogenicity:	NTP-Non-carcinogenic (National Toxicology Program)	IARC Monographs (International Agency for Research in Cancer)	OSHA Regulated-Yes
Signs and Symptoms of Exposure: None known			
Medical Conditions Generally Aggravated by Exposure: None known			
Emergency / First Aid Procedures	Ingestion: INDUCE VOMITING ONLY ON THE ADVICE OF A MEDICAL PROFESSIONAL		
	Inhalation: REMOVE TO FRESH AIR, SEEK PROMPT MEDICAL ATTENTION IF IRRITATION DEVELOPS		
	Eye Contact: WASH WITH COPIOUS AMOUNTS OF WATER		
	Skin Contact: WASH WITH SOAP AND COPIOUS AMOUNTS OF WATER		

Section VII – Precautions for Safe Handling and Use
Accidental Release Measures: SWEEP OR MOP UP RELEASED MATERIAL TO SUITABLE CONTAINER
Waste Disposal Method: DISPOSAL IN DRY LANDFILL IS ACCEPTABLE. ENSURE COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
Handling and Storing: READ AND FOLLOW ALL LABEL DIRECTIONS
Other Precautions: FOR VETERINARY USE ONLY

Section VIII – Control Measures		
Respiratory Protection (Specify Type): NONE REQUIRED		
Ventilation	Local Exhaust: GENERAL DILUTION OR LOCAL EXHUAST	Special:
	Mechanical (General):	Other:
Protective Gloves: RUBBER GLOVES		Eye Protection: SAFETY GOGGLES OR GLASSES
Other Protective Clothing or Equipment: NOT NECESSARY		
Work / Hygienic Practices:		

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.

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Unusual Fire and Explosion Hazards: NONE	

Section V – Reactivity Data			
Stability	Unstable		Conditions to Avoid: NONE KNOWN
	Stable	X	
Incompatibility (<i>Materials to Avoid</i>): ALKALIS AND ALKALINE DRUGS, OX IDIZING AND REDUCING AGENTS			
Hazardous Decomposition or Byproducts: SULFUR OXIDES AND NITROGEN OXIDES			
Hazardous Polymerization	May Occur		Conditions to Avoid: NONE KNOWN
	Will Not Occur	X	

Section VI – Health Hazard Data			
Route(s) of Entry:	Inhalation-Minor	Skin-Minor	Ingestion-Primary
Health Hazards (Acute and Chronic)	None known-essential nutrient		
Carcinogenicity:	NTP-Non-carcinogenic (National Toxicology Program)	IARC Monographs (International Agency for Research in Cancer)	OSHA Regulated-Yes
Signs and Symptoms of Exposure: None known			
Medical Conditions Generally Aggravated by Exposure: None known			
Emergency / First Aid Procedures	Ingestion: INDUCE VOMITING ONLY ON THE ADVICE OF A MEDICAL PROFESSIONAL		
	Inhalation: REMOVE TO FRESH AIR, SEEK PROMPT MEDICAL ATTENTION IF IRRITATION DEVELOPS		
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Accidental Release Measures: SWEEP OR MOP UP RELEASED MATERIAL TO SUITABLE CONTAINER
Waste Disposal Method: DISPOSAL IN DRY LANDFILL IS ACCEPTABLE. ENSURE COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
Handling and Storing: READ AND FOLLOW ALL LABEL DIRECTIONS
Other Precautions: FOR VETERINARY USE ONLY

Section VIII – Control Measures		
Respiratory Protection (Specify Type): NONE REQUIRED		
Ventilation	Local Exhaust: GENERAL DILUTION OR LOCAL EXHUAST	Special:
	Mechanical (General):	Other:
Protective Gloves: RUBBER GLOVES		Eye Protection: SAFETY GOGGLES OR GLASSES
Other Protective Clothing or Equipment: NOT NECESSARY		
Work / Hygienic Practices:		

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

1.1 Product identifier

- Product Name(s): **Thiamine Hydrochloride 500mg/mL**
- Product Part Number(s): **09083**
- Brand(s): Neogen®Vet

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

- Use of the substance/preparation: An injectable sterile solution for use in domestic animals.
- Uses advised against: CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian. For animal use only. Not for human use.

1.3 Details of the supplier of the safety data sheet

- Name of Manufacturer: Sparhawk Laboratories, Inc. for Neogen Corporation
- Address of Manufacturer: 944 Nandino Blvd.
Lexington, Kentucky 40511
USA
- Telephone: 859/254-1221 • 800/525-2022
- Email: Inform@neogen.com

1.4 Emergency telephone number

- Emergency Telephone: Chemtrec: 1 (800) 424-9300
Outside USA and Canada: +1 (703) 527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (29 CFR 1910.1200)

- Not classified as hazardous for supply

Classification (WHMIS 2015 HPR)

- Not classified as hazardous for supply

2.2 Label elements

- Signal Word: None
- Symbols: None
- Hazard phrases
None
- Precautionary Phrases
Wash hands thoroughly after handling.
Avoid prolonged contact with skin, eyes, or clothing.

2.3 Other hazards

- May cause nausea or other gastrointestinal symptoms if swallowed.
- Keep out of reach of children.

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

This product is a mixture of the substances listed below with the addition of non-hazardous materials

Chemical	Concentration	CAS No.	H-Statements	Symbols
Benzyl alcohol	2.00%	100-21-6	H302, H332	GHS07
Thiamine HCl	50.00%	67-03-8	None	None

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

- For full text of Hazard statements: see Section 16.

SECTION 4 First aid measures

4.1 Description of first aid measures

- General
In case of doubt, or when symptoms persist, seek medical attention.
If used as directed, this product is not hazardous to humans or animals, but like any other chemical, it should be treated with care, respect, and common sense.

SECTION 4 First aid measures (continued)

- Contact with skin
 - Remove contaminated clothing.
 - Rinse affected area with plenty of water.
 - Contaminated clothing should be laundered before reuse.
 - Contact with eyes
 - If substance has gotten into eyes, rinse with plenty of water for at least 15 minutes.
 - Irrigate eyes thoroughly while lifting eyelids.
 - Seek medical advice if necessary.
 - Ingestion
 - Rinse mouth with water (do not swallow).
 - Never make an unconscious person vomit or drink fluids.
 - If medical advice is needed, have product container or label at hand.
 - Inhalation
 - If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
 - Call a poison center or doctor/physician if you feel unwell.
- 4.2 Most important symptoms and effects, both acute and delayed
- The most important known symptoms are described in the labeling (see Section 2.2) and/or in Section 11.
- 4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.
 - Parenteral administration of thiamine hydrochloride has resulted in anaphylactic shock.
-

SECTION 5: Fire-fighting measures

- 5.1 Extinguishing media
- In case of fire: use water spray, foam, carbon dioxide or dry agent for extinction.
- 5.2 Special hazards arising from the substance or mixture
- Smoke from fires is toxic. Take precautions to protect personnel from exposure.
 - See Section 10.
- 5.3 Advice for firefighters
- Keep container(s) exposed to fire cool, by spraying with water.
 - Wear chemical protection suit and positive-pressure breathing apparatus, if necessary.
 - Wear protective clothing as per Section 8.
- 5.4 Hazardous Combustion Products
- May include carbon oxides.
-

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
- Spills should be cleaned up immediately to avoid slip and fall accidents and injuries.
 - Wear protective clothing as per Section 8.
 - Evacuate personnel not directly involved in spill clean-up.
 - Shut off source of leak/release, if safe to do so.
 - Shut down and/or remove equipment in spill area, if safe to do so.
 - Wash thoroughly after dealing with spillage.
- 6.2 Environmental Precautions
- Do not allow to enter public sewers and watercourses.
 - Avoid releasing to the environment.
- 6.3 Methods and material for containment and cleaning up
- Absorb spillage in inert material and shovel up.
 - Dike large spills as necessary.
 - Place in sealable containers and label them.
 - Ventilate the area and wash spill site after material pick-up is complete.
 - Dispose of contaminated materials, rinsates, and wastes in accordance with local/national/international regulations.
- 6.4 Reference to other sections
- See Section 7 for storage. For disposal, see Section 13.
-

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Do not breathe mist/vapors/fumes/spray.
- Avoid contact with skin and eyes.
- Do not eat, drink, smoke, or apply cosmetics when using this product.
- Ensure adequate ventilation.
- Eyewash bottles should be available.
- Wash hands thoroughly after using this substance.

7.2 Conditions for safe storage, including any incompatibilities

- Store at controlled room temperatures between 15-30°C (59-86°F).
- Keep out of reach of children.

7.3 Specific end use(s)

- An injectable sterile solution for use in domestic animals.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Basis
Benzyl alcohol	100-51-6	TWA	10 ppm	USA. Workplace Environmental Exposure Levels (WEEL)

8.2 Exposure controls

- Eyewash bottles should be available.
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved respiratory protection.
- Wear protective gloves to prevent prolonged or repeated skin contact.
- Wear safety glasses approved to standard for ANSI Z87, according to the concentration and amount of dangerous substance at the specific workplace.
- Wear suitable protective clothing in accordance with good industrial hygiene and safety practices in the event of prolonged exposure to bulk quantities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Clear liquid
- Odor: No information available
- pH: No information available
- Melting Point/Range: No information available
- Boiling Point/Range: No information available
- Flashpoint: No information available
- Evaporation Rate: Not information available
- Flammability: No information available
- Vapor Pressure: No information available
- Vapor Density: No information available
- Specific Gravity: No information available
- Solubility in water: No information available
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: Product is not self-igniting
- Viscosity: No information available
- Explosive Properties: Product does not present an explosion hazard
- Oxidizing Properties: Product is not classified as an oxidizer.

9.2 Other information

- No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

- No information available

SECTION 10: Stability and reactivity (continued)

10.2 Chemical stability

- Considered stable under normal conditions.

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

- None known

10.5 Incompatible materials

- None known

10.6 Hazardous Decomposition Products

- May include carbon oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- No experimental test data available for mixture
- ATEmix = 6,667 mg/kg (oral)
- Contact with skin
 - May cause redness and irritation in sensitive individuals.
 - Based on available data, the classification criteria are not met.
- Contact with eyes
 - May cause redness and irritation in sensitive individuals.
 - Based on available data, the classification criteria are not met.
- Ingestion
 - Product is not toxic, but may cause nausea or other gastrointestinal symptoms in sensitive individuals.
 - Based on available data, the classification criteria are not met.
- Inhalation
 - Not a likely route of exposure. May cause respiratory irritation in sensitive individuals if inhaled.
 - Based on available data, the classification criteria are not met.
- Carcinogenicity
 - Not listed in the National Toxicology Program (NTP) 13th Report on Carcinogens.
 - Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-112.
 - Not listed in OSHA standard 1910.1003 Carcinogens.
- Mutagenicity
 - No evidence of mutagenic effects.
- Teratogenicity
 - No evidence of teratogenic effects.

SECTION 12: Ecological information

12.1 Toxicity

Benzyl alcohol

Toxicity to fish

LC₅₀ – Lepomis macrochirus (Bluegill) = 10 mg/L-96h

LC₅₀ – Pimephales promelas (Fathead minnow) = 460 mg/L-96h

Toxicity to daphnia and other aquatic invertebrates

EC₅₀ – Daphnia magna (Water flea) = 55 mg/L-24h

EC₅₀ – Daphnia magna (Water flea) = 230 mg/L-48h

12.2 Persistence and degradability

Biodegradability

Biotic/Aerobic – Exposure time 28d

Result: 92-96% (Readily biodegradable)

Aerobic biochemical oxygen demand – Exposure time 7d

Result: 92-96% (Readily biodegradable)

(OECD Test Guideline 301C)

SECTION 12: Ecological information (continued)

12.3 Bioaccumulation Potential

- No information available

12.4 Mobility in soil

- No information available

12.5 Other Adverse Effects

- To the best of our knowledge, the properties of this material have not been fully evaluated.
-

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state, national, or international regulations.
 - Do not discharge into drains or the environment, dispose to an approved waste disposal facility.
 - Do not reuse empty containers.
-

SECTION 14: Transport information

14.1 UN Number

- Not classified as hazardous for transport

14.2 UN Proper Shipping Name

- Not applicable

14.3 Transport hazard class(es)

- Not applicable

14.4 Packing group

- Not applicable

14.5 Environmental hazards

- Not classified

14.6 Special precautions for user

- Not classified

14.7 Domestic Surface Transport (US DOT)

- Proper Shipping Name: Not applicable
- DOT UN No.: Not applicable
- DOT Hazard Class: Not applicable
- DOT Packing Group: Not applicable

14.8 International Road/Rail (ADR/RID)

- Proper Shipping Name: Not applicable
- ADR UN No.: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- Tunnel Code: Not applicable

14.9 Ocean/Sea (IMO/IMDG)

- Proper Shipping Name: Not applicable
- IMDG UN No.: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Packing Group: Not applicable

14.10 Air (ICAO/IATA)

- Proper Shipping Name: Not applicable
 - ICAO UN No.: Not applicable
 - ICAO Hazard Class: Not applicable
 - ICAO Packing Group: Not applicable
-

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
The labeling requirements of the Federal Food, Drug, and Cosmetic Act differ from the classification criteria and hazard information required for safety data sheets and for workplace labels under the OSHA Hazard Communication Standard 29 CFR 1910.1200. Following is the hazard information as required on the drug label:

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.
KEEP OUT OF REACH OF CHILDREN
FOR ANIMAL USE ONLY
NOT FOR HUMAN USE

- NDC: 59051-9083-5

15.2 United States 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 material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Toxic Substance Control Act (TSCA)

This product is exempt from TSCA under Section 3(2)(B)(vi) when used for pharmaceutical application.

State Right-to-Know

Massachusetts

Benzyl alcohol, CAS No. 100-51-6

Pennsylvania

Benzyl alcohol, CAS No. 100-51-6

15.3 Canadian Regulatory Information

- This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR). The labelling may differ subject to the requirements of the Food and Drugs Act (FDA).
- WHMIS Classification: Exempt
- Inventory Status

Domestic Substances List (DSL)	Listed
Non-Domestic Substances List (NDSL)	Not listed

SECTION 16: Other information

Document Number: SDS-9039, Thiamine Hydrochloride

Date of Preparation: June 22, 2016

Revision: Rev. 0

Replaces: New issue

Text not given with phrase codes where they are used elsewhere in this safety data sheet: H302: Harmful if swallowed. H332: Harmful if inhaled.

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

1.1 Product identifier

- Product Name(s): **Thiamine Hydrochloride 500mg/mL**
- Product Part Number(s): **09083**
- Brand(s): Neogen®Vet

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

- Use of the substance/preparation: An injectable sterile solution for use in domestic animals.
- Uses advised against: CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian. For animal use only. Not for human use.

1.3 Details of the supplier of the safety data sheet

- Name of Manufacturer: Sparhawk Laboratories, Inc. for Neogen Corporation
- Address of Manufacturer: 944 Nandino Blvd.
Lexington, Kentucky 40511
USA
- Telephone: 859/254-1221 • 800/525-2022
- Email: Inform@neogen.com

1.4 Emergency telephone number

- Emergency Telephone: Chemtrec: 1 (800) 424-9300
Outside USA and Canada: +1 (703) 527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (29 CFR 1910.1200)

- Not classified as hazardous for supply

Classification (WHMIS 2015 HPR)

- Not classified as hazardous for supply

2.2 Label elements

- Signal Word: None
- Symbols: None
- Hazard phrases
None
- Precautionary Phrases
Wash hands thoroughly after handling.
Avoid prolonged contact with skin, eyes, or clothing.

2.3 Other hazards

- May cause nausea or other gastrointestinal symptoms if swallowed.
- Keep out of reach of children.

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

This product is a mixture of the substances listed below with the addition of non-hazardous materials

Chemical	Concentration	CAS No.	H-Statements	Symbols
Benzyl alcohol	2.00%	100-21-6	H302, H332	GHS07
Thiamine HCl	50.00%	67-03-8	None	None

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

- For full text of Hazard statements: see Section 16.

SECTION 4 First aid measures

4.1 Description of first aid measures

- General
In case of doubt, or when symptoms persist, seek medical attention.
If used as directed, this product is not hazardous to humans or animals, but like any other chemical, it should be treated with care, respect, and common sense.

SECTION 4 First aid measures (continued)

- Contact with skin
 - Remove contaminated clothing.
 - Rinse affected area with plenty of water.
 - Contaminated clothing should be laundered before reuse.
 - Contact with eyes
 - If substance has gotten into eyes, rinse with plenty of water for at least 15 minutes.
 - Irrigate eyes thoroughly while lifting eyelids.
 - Seek medical advice if necessary.
 - Ingestion
 - Rinse mouth with water (do not swallow).
 - Never make an unconscious person vomit or drink fluids.
 - If medical advice is needed, have product container or label at hand.
 - Inhalation
 - If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
 - Call a poison center or doctor/physician if you feel unwell.
- 4.2 Most important symptoms and effects, both acute and delayed
- The most important known symptoms are described in the labeling (see Section 2.2) and/or in Section 11.
- 4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.
 - Parenteral administration of thiamine hydrochloride has resulted in anaphylactic shock.
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SECTION 5: Fire-fighting measures

- 5.1 Extinguishing media
- In case of fire: use water spray, foam, carbon dioxide or dry agent for extinction.
- 5.2 Special hazards arising from the substance or mixture
- Smoke from fires is toxic. Take precautions to protect personnel from exposure.
 - See Section 10.
- 5.3 Advice for firefighters
- Keep container(s) exposed to fire cool, by spraying with water.
 - Wear chemical protection suit and positive-pressure breathing apparatus, if necessary.
 - Wear protective clothing as per Section 8.
- 5.4 Hazardous Combustion Products
- May include carbon oxides.
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SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
- Spills should be cleaned up immediately to avoid slip and fall accidents and injuries.
 - Wear protective clothing as per Section 8.
 - Evacuate personnel not directly involved in spill clean-up.
 - Shut off source of leak/release, if safe to do so.
 - Shut down and/or remove equipment in spill area, if safe to do so.
 - Wash thoroughly after dealing with spillage.
- 6.2 Environmental Precautions
- Do not allow to enter public sewers and watercourses.
 - Avoid releasing to the environment.
- 6.3 Methods and material for containment and cleaning up
- Absorb spillage in inert material and shovel up.
 - Dike large spills as necessary.
 - Place in sealable containers and label them.
 - Ventilate the area and wash spill site after material pick-up is complete.
 - Dispose of contaminated materials, rinsates, and wastes in accordance with local/national/international regulations.
- 6.4 Reference to other sections
- See Section 7 for storage. For disposal, see Section 13.
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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Do not breathe mist/vapors/fumes/spray.
- Avoid contact with skin and eyes.
- Do not eat, drink, smoke, or apply cosmetics when using this product.
- Ensure adequate ventilation.
- Eyewash bottles should be available.
- Wash hands thoroughly after using this substance.

7.2 Conditions for safe storage, including any incompatibilities

- Store at controlled room temperatures between 15-30°C (59-86°F).
- Keep out of reach of children.

7.3 Specific end use(s)

- An injectable sterile solution for use in domestic animals.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Basis
Benzyl alcohol	100-51-6	TWA	10 ppm	USA. Workplace Environmental Exposure Levels (WEEL)

8.2 Exposure controls

- Eyewash bottles should be available.
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved respiratory protection.
- Wear protective gloves to prevent prolonged or repeated skin contact.
- Wear safety glasses approved to standard for ANSI Z87, according to the concentration and amount of dangerous substance at the specific workplace.
- Wear suitable protective clothing in accordance with good industrial hygiene and safety practices in the event of prolonged exposure to bulk quantities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Clear liquid
- Odor: No information available
- pH: No information available
- Melting Point/Range: No information available
- Boiling Point/Range: No information available
- Flashpoint: No information available
- Evaporation Rate: Not information available
- Flammability: No information available
- Vapor Pressure: No information available
- Vapor Density: No information available
- Specific Gravity: No information available
- Solubility in water: No information available
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: Product is not self-igniting
- Viscosity: No information available
- Explosive Properties: Product does not present an explosion hazard
- Oxidizing Properties: Product is not classified as an oxidizer.

9.2 Other information

- No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

- No information available

SECTION 10: Stability and reactivity (continued)

10.2 Chemical stability

- Considered stable under normal conditions.

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

- None known

10.5 Incompatible materials

- None known

10.6 Hazardous Decomposition Products

- May include carbon oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- No experimental test data available for mixture
- ATEmix = 6,667 mg/kg (oral)
- Contact with skin
 - May cause redness and irritation in sensitive individuals.
 - Based on available data, the classification criteria are not met.
- Contact with eyes
 - May cause redness and irritation in sensitive individuals.
 - Based on available data, the classification criteria are not met.
- Ingestion
 - Product is not toxic, but may cause nausea or other gastrointestinal symptoms in sensitive individuals.
 - Based on available data, the classification criteria are not met.
- Inhalation
 - Not a likely route of exposure. May cause respiratory irritation in sensitive individuals if inhaled.
 - Based on available data, the classification criteria are not met.
- Carcinogenicity
 - Not listed in the National Toxicology Program (NTP) 13th Report on Carcinogens.
 - Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-112.
 - Not listed in OSHA standard 1910.1003 Carcinogens.
- Mutagenicity
 - No evidence of mutagenic effects.
- Teratogenicity
 - No evidence of teratogenic effects.

SECTION 12: Ecological information

12.1 Toxicity

Benzyl alcohol

Toxicity to fish

LC₅₀ – Lepomis macrochirus (Bluegill) = 10 mg/L-96h

LC₅₀ – Pimephales promelas (Fathead minnow) = 460 mg/L-96h

Toxicity to daphnia and other aquatic invertebrates

EC₅₀ – Daphnia magna (Water flea) = 55 mg/L-24h

EC₅₀ – Daphnia magna (Water flea) = 230 mg/L-48h

12.2 Persistence and degradability

Biodegradability

Biotic/Aerobic – Exposure time 28d

Result: 92-96% (Readily biodegradable)

Aerobic biochemical oxygen demand – Exposure time 7d

Result: 92-96% (Readily biodegradable)

(OECD Test Guideline 301C)

SECTION 12: Ecological information (continued)

12.3 Bioaccumulation Potential

- No information available

12.4 Mobility in soil

- No information available

12.5 Other Adverse Effects

- To the best of our knowledge, the properties of this material have not been fully evaluated.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state, national, or international regulations.
- Do not discharge into drains or the environment, dispose to an approved waste disposal facility.
- Do not reuse empty containers.

SECTION 14: Transport information

14.1 UN Number

- Not classified as hazardous for transport

14.2 UN Proper Shipping Name

- Not applicable

14.3 Transport hazard class(es)

- Not applicable

14.4 Packing group

- Not applicable

14.5 Environmental hazards

- Not classified

14.6 Special precautions for user

- Not classified

14.7 Domestic Surface Transport (US DOT)

- Proper Shipping Name: Not applicable
- DOT UN No.: Not applicable
- DOT Hazard Class: Not applicable
- DOT Packing Group: Not applicable

14.8 International Road/Rail (ADR/RID)

- Proper Shipping Name: Not applicable
- ADR UN No.: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- Tunnel Code: Not applicable

14.9 Ocean/Sea (IMO/IMDG)

- Proper Shipping Name: Not applicable
- IMDG UN No.: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Packing Group: Not applicable

14.10 Air (ICAO/IATA)

- Proper Shipping Name: Not applicable
 - ICAO UN No.: Not applicable
 - ICAO Hazard Class: Not applicable
 - ICAO Packing Group: Not applicable
-

SECTION 15: Regulatory information

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

The labeling requirements of the Federal Food, Drug, and Cosmetic Act differ from the classification criteria and hazard information required for safety data sheets and for workplace labels under the OSHA Hazard Communication Standard 29 CFR 1910.1200. Following is the hazard information as required on the drug label:

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

KEEP OUT OF REACH OF CHILDREN

FOR ANIMAL USE ONLY

NOT FOR HUMAN USE

- NDC: 59051-9083-5

15.2 United States 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 material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Toxic Substance Control Act (TSCA)

This product is exempt from TSCA under Section 3(2)(B)(vi) when used for pharmaceutical application.

State Right-to-Know

Massachusetts

Benzyl alcohol, CAS No. 100-51-6

Pennsylvania

Benzyl alcohol, CAS No. 100-51-6

15.3 Canadian Regulatory Information

- This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR). The labelling may differ subject to the requirements of the Food and Drugs Act (FDA).
- WHMIS Classification: Exempt
- Inventory Status

Domestic Substances List (DSL)	Listed
Non-Domestic Substances List (NDSL)	Not listed

SECTION 16: Other information

Document Number: SDS-9039, Thiamine Hydrochloride

Date of Preparation: June 22, 2016

Revision: Rev. 0

Replaces: New issue

Text not given with phrase codes where they are used elsewhere in this safety data sheet: H302: Harmful if swallowed. H332: Harmful if inhaled.

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.