

SAFETY DATA SHEETS

This SDS packet was issued with item:

078552178

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

078552186



MATERIAL SAFETY DATA SHEET

Section I – Product Information			
Product Name or Identity:	BotVax® B	Emergency Phone No.:	800-424-9300
Manufacturer's Name:	Neogen Corporation	Int'l Emergency Phone No.:	703-527-3887
	944 Nandino Blvd	<i>Collect Calls Accepted</i>	
	Lexington, KY 40511	Phone No.:	859-254-1221
Date Prepared or Revised: 10/23/2014		Fax No.:	859-255-5532

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
This is a Non-Hazardous Product which contains no hazardous components.	N/A	N/A	N/A

Section III – Physical Characteristics	
Boiling Point:: No data available	Specific Gravity (H ₂ O = 1): N/A
Vapor Pressure (mm Hg.): N/A	Melting Point: N/A
Vapor Density (AIR = 1): N/A	Evaporation Rate (Butyl Acetate = 1): N/A
Solubility in Water: Forms a suspension with water.	
Appearance and Odor: Clear liquid with visible sediment. No characteristic odor.	

Section IV – Fire and Explosion Hazard Data	
Flash Point (<i>Method Used</i>): Non-Flammable	Flammable Limits: LEL (Lower Explosive Limit) - N/A UEL (Upper Explosive Limit) - N/A
Extinguishing Media: N/A	
Special Fire Fighting Procedures: N/A	
Unusual Fire and Explosion Hazards: N/A	

Section V – Reactivity Data			
Stability	Unstable		Conditions to Avoid: None known
	Stable	X	
Incompatibility (<i>Materials to Avoid</i>): N/A			
Hazardous Decomposition or Byproducts: None known			
Hazardous Polymerization	May Occur		Conditions to Avoid: None known
	Will Not Occur	X	

Section VI – Health Hazard Data			
Route(s) of Entry:	Inhalation-Not likely route of entry	Skin-Not likely route of entry	Ingestion-Not likely route of exposure
Health Hazards (Acute and Chronic)	Final product poses no known health risk.		
Carcinogenicity: NTP-Not listed (National Toxicology Program)	IARC Monographs-Not listed (International Agency for Research in Cancer)	OSHA Regulated-No	
Signs and Symptoms of Exposure: No signs or symptoms of disease are known to be associated with this product.			
Medical Conditions Generally Aggravated by Exposure: No applicable information found.			
Emergency / First Aid Procedures	Ingestion: No information available regarding adverse effects via ingestion. Ingestion not considered a likely route of exposure.		
	Inhalation: Not considered a route of potential exposure. Saline media is not volatile.		
	Eye Contact: Not considered an eye irritant. Wash with soap and water after prolonged contact. If irritation develops consult a physician.		
	Skin Contact: Not considered a skin irritant. Wash with soap and water after prolonged contact. If irritation develops consult a physician.		
	Injected into Skin: Contact a physician or the poison control center (Status of tetanus immunization should be reviewed). The product is an inactivated neurotoxin and is not biologically active. However, it is capable of inducing the production of antibodies against Clostridium botulinum Type B neurotoxin.		

Section VII – Precautions for Safe Handling and Use
Accidental Release Measures: Recover spilled product by applying absorbents (towels, rags or sawdust, etc) to the spill. Shovel and sweep up spilled product and absorbent waste and transfer to a suitable container.
Waste Disposal Method: Product may be deposited in trash and disposed of in a sanitary landfill. Product container may be deposited in trash and disposed of in a sanitary landfill in accordance with local, state and Federal regulations.
Handling and Storing: Store product at 36 - 45° F (2-7° C). Protect from freezing. Avoid accidental injection with product.
Other Precautions: For veterinary use only.

Section VIII – Control Measures		
Respiratory Protection (Specify Type):		
Ventilation	Local Exhaust: Adequate	Special:
	Mechanical (General):	Other:
Protective Gloves: Rubber latex		Eye Protection: Safety goggles or glasses.
Other Protective Clothing or Equipment: Normal work practices and equipment, which minimize prolonged skin or eye contact.		
Work / Hygienic Practices: Normal work and 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.

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

1.1 Product identifier

- Product Name(s): **BotVax® B *Clostridium Botulinum* Type B Toxoid**
- Product Part Number(s): **200180, 200180-CAN, 200181**
- Brand(s): NeogenVet®

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

- Use of the substance/preparation: Injectable *Clostridium Botulinum* Type B toxoid for use in healthy horses.
- Uses advised against: For veterinary use only. Do not vaccinate food-producing animals within 21 days of slaughter.

1.3 Details of the supplier of the safety data sheet

- Name of Manufacturer: Neogen Corporation
- Address of Manufacturer: 1614 E. Kalamazoo St.
Lansing, MI 48912
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
Sterile when unopened.
Do not freeze.
Not for human use.

2.3 Other hazards

- 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
<i>Clostridium Botulinum</i> Type B Toxoid (inactivated)	20-40%	n/a	None	None
Aluminum phosphate	~50% (adsorbed)	7784-30-7	None	None
Saline solution	q.s.	7647-14-5	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.
In general, this product is not hazardous to humans or animals, but like any other chemical, it should be treated with care, respect, and common sense.
- Contact with skin
Remove contaminated clothing.
Wash affected area with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
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

- Transitory local reactions at the injection site such as heat and minor swelling may occur. In the event of anaphylactoid reactions, epinephrine is antidotal.

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.

SECTION 6: Accidental release measures (continued)

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 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 eyes.
- Do not eat, drink, smoke, or apply cosmetics when using this product.
- Eyewash bottles should be available.
- Wash hands thoroughly after using this substance.

7.2 Conditions for safe storage, including any incompatibilities

- Store controlled temperature between 2-7°C (35-45°F).
- Shake well before use
- Do not freeze.
- Sterile when unopened.
- Use entire contents when opened.
- Keep out of reach of children.

7.3 Specific end use(s)

- Injectable *Clostridium Botulinum* Type B toxoid for use in healthy horses.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Basis
Aluminum orthophosphate	7784-30-7	TWA	1 mg/m ³	USA-ACGIH Threshold Limit Values (TLV)
	Remarks:	Lower respiratory tract irritation Pneumoconiosis Neurotoxicity		

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: Odorless
- pH: 5.3 – 5.7
- Melting Point/Range: Not applicable
- Boiling Point/Range: No information available
- Flashpoint: No information available
- Evaporation Rate: No information available
- Flammability: No information available

SECTION 9: Physical and chemical properties (continued)

- 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

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

- Do not freeze.

10.5 Incompatible materials

- None known

10.6 Hazardous Decomposition Products

- None known

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- No experimental test data available for mixture
- ATEmix = 4,000 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 irritation of the throat and/or nausea in sensitive individuals.
Based on available data, the classification criteria are not met.
- Inhalation
Not a likely route of exposure. May cause 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 information available
- Teratogenicity
No information available

SECTION 12: Ecological information

12.1 Toxicity

Sodium chloride

Toxicity to fish

LC₅₀ – *Lepomis macrochirus* (Bluegill) – 5840 mg/L-96h

Toxicity to daphnia and other aquatic invertebrates

NOEC = 1500 mg/L-7d

EC₅₀ – *Daphnia magna* (Water flea) – 1661 mg/L-48h

12.1 Persistence and degradability

- No information available

12.2 Bioaccumulation Potential

- No information available

12.3 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.
- On available data, substance is not harmful to the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, regional, national, and/or international regulations.
- Do not discharge into drains or the environment, dispose to an authorized waste collection point.
- 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 a marine pollutant

14.6 Special precautions for user

- None

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

SECTION 14: Transport information (continued)

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 Virus-Serum-Toxin Act (VSTA) 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 vaccine label:

FOR VETERINARY USE ONLY

U.S. Vet. Lic. No. 302

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

No SARA Hazards

Toxic Substance Control Act (TSCA)

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

California Prop 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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 under the jurisdiction of the Center for Veterinary Biologics.
- WHMIS Classification: Exempt
- Inventory Status

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

SECTION 16: Other information

Document Number: SDS-0065, BotVax® B

Date of Preparation: June 7, 2016

Revision: Rev. 0

Replaces: New issue

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.