

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

078098805

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

078088228 078920446

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

## 1.1 Product identifier

- Product Name(s): **Mannitol Injection 20%**
- Product Part Number(s): **09061**
- Brand(s): NeogenVet®

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

- Use of the substance/preparation: Injectable osmotic diuretic in canine species.
- Use advised against: CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian. For veterinary use only. Not for human use.

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

- Name of Manufacturer: Nova-Tech, 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](mailto: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

Additional information:

## 2.2 Label elements

- Signal Word: None
- Symbols: None
- Hazard phrases  
None
- Precautionary phrases  
Keep container tightly closed.  
Do not breathe mist/vapors/fumes/spray.  
Avoid contact with eyes, skin, or clothing.

## 2.3 Other hazards

- May be mildly irritating to skin and eyes.

**SECTION 3 Composition/information on ingredients**

## 3.1 Substances

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

Chemical	Concentration	CAS No.	H-Statements	Symbols
Mannitol	20%	69-65-8	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.

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.

## SECTION 4 First aid measures (continued)

- 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

- Treat symptomatically.

---

## 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.
- 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

- Avoid breathing 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 temperatures between 15-30°C/59-86°F.

### 7.3 Specific end use(s)

- Injectable osmotic diuretic in canine species.

---

## SECTION 8 Exposure controls/personal protection

### 8.1 Control parameters

- This product contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

- No respiratory protection is needed if ventilation is adequate, otherwise wear approved respiratory protection.
- Wear protective gloves according to the concentration and amount of dangerous substance at the specific workplace.
- 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, colorless solution; crystals may be present
- Odor: Odorless
- pH: 4.5 – 7.0
- Melting Point/Range: Not applicable
- Boiling Point/Range: No information available
- Flashpoint: No information available
- Evaporation Rate: No 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

### 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

## SECTION 10 Stability and reactivity (continued)

### 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 the mixture
- ATEmix = 62,500 mg/kg (oral)
- Based on available data, the classification criteria are not met.
- 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) 13<sup>th</sup> 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

- This product is not classified as hazardous to the environment under U.S. regulations.

### 12.2 Persistence and degradability

- No information available

### 12.3 Bioaccumulation Potential

- No information available

### 12.4 Mobility in soil

- No information available

### 12.6 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 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 Ocean/Sea (IMO/IMDG)

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

### 14.9 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 Veterinary Use Only

- NDC: 59051-8061-5

### 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

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.

**SECTION 15: Regulatory information (continued)**

## 15.4 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-9020, Mannitol Injection 20%

Date of Preparation: May 10, 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.



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

## 1.1 Product identifier

- Product Name(s): **Mannitol Injection 20%**
- Product Part Number(s): **09061**
- Brand(s): NeogenVet®

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

- Use of the substance/preparation: Injectable osmotic diuretic in canine species.
- Use advised against: CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian. For veterinary use only. Not for human use.

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

- Name of Manufacturer: Nova-Tech, 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](mailto: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

Additional information:

## 2.2 Label elements

- Signal Word: None
- Symbols: None
- Hazard phrases  
None
- Precautionary phrases  
Keep container tightly closed.  
Do not breathe mist/vapors/fumes/spray.  
Avoid contact with eyes, skin, or clothing.

## 2.3 Other hazards

- May be mildly irritating to skin and eyes.

**SECTION 3 Composition/information on ingredients**

## 3.1 Substances

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

Chemical	Concentration	CAS No.	H-Statements	Symbols
Mannitol	20%	69-65-8	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.

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.



## SECTION 4 First aid measures (continued)

- 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

- Treat symptomatically.

---

## 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.
- 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

- Avoid breathing 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 temperatures between 15-30°C/59-86°F.

### 7.3 Specific end use(s)

- Injectable osmotic diuretic in canine species.

---

## SECTION 8 Exposure controls/personal protection

### 8.1 Control parameters

- This product contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

- No respiratory protection is needed if ventilation is adequate, otherwise wear approved respiratory protection.
- Wear protective gloves according to the concentration and amount of dangerous substance at the specific workplace.
- 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, colorless solution; crystals may be present
- Odor: Odorless
- pH: 4.5 – 7.0
- Melting Point/Range: Not applicable
- Boiling Point/Range: No information available
- Flashpoint: No information available
- Evaporation Rate: No 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

### 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

**SECTION 10 Stability and reactivity (continued)**

## 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 the mixture
- ATEmix = 62,500 mg/kg (oral)
- Based on available data, the classification criteria are not met.
- 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) 13<sup>th</sup> 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

- This product is not classified as hazardous to the environment under U.S. regulations.

## 12.2 Persistence and degradability

- No information available

## 12.3 Bioaccumulation Potential

- No information available

## 12.4 Mobility in soil

- No information available

## 12.6 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 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 Ocean/Sea (IMO/IMDG)**

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

**14.9 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 Veterinary Use Only

- NDC: 59051-8061-5

**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**

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.

**SECTION 15: Regulatory information (continued)****15.4 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-9020, Mannitol Injection 20%

Date of Preparation: May 10, 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.