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

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Manniject 20%

AS SOLD BY VETUS ANIMAL HEALTH

A Service of



MATERIAL SAFETY DATA SHEET

Vetus Animal Health

Manufactured For Vetus Animal Health By Neogen Corporation

Section I – Product Information					
Product Name or Identity:	MANNIJECT (MANNITOL INJECT	TION)			
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: 1	1/15/05				

Section II – Hazardous Ingredients / Identity Information					
Hazardous Components	OSHA PEL	ACGIH TLV	Toxicity Data		
(Specific Chemical Identity: Common Names)	(Permissible	(Threshold	LD ₅₀		
	Exposure Limits)	Limit Value)			
None					
Non-hazardous component::	N/A	N/A	N/A		
Mannitol 20% w/v CAS 69-65-8					

Section III – Physical Characteristics				
Boiling Point: No data available	Specific Gravity (H ₂ O = 1): 1.07			
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, colorless, odorless liquid				

Section IV – Fire and Explosion Hazard Data				
Flash Point (Method Used): No data available	Flammable Limits: LEL (Lower Explosive Limit) - N/A			
	UEL (Upper Explosive Limit) - N/A			
Extinguishing Media: Water spray, CO2, dry chemical powder, foam				
Special Fire Fighting Procedures: Wear full faceplate and NIOSH-Approved self-container breathing apparatus				
Unusual Fire and Explosion Hazards: None				

Section V – Reactivity Data					
Stability	Unstable	nstable Conditions to Avoid: None known		ons to Avoid: None known	
	Stable	able X			
Incompatibilit	ty (Materials to	Avoid):	Oxidizir	ng agents	
Hazardous D	ecomposition o	r Bypro	ducts: C	arbon monoxide, carbon dioxide	
Hazardous May Occur Polymerization			Conditions to Avoid: None known		
	Will Not C)ccur	Х		

Section VI – Health Hazard Data					
Route(s) of Entry:	Inhalation-Minor	Skin-Minor	Ingestion-Primary		
Health Hazards None known (Acute and Chronic)					
Carcinogenicity:	NTP-Non-carcinogenic	IARC Monographs-Not listed	OSHA Regulated-Yes		
	(National Toxicology Program)	(International Agency for Research in Cancer)			
Excessive consum	ms of Exposure: No adverse on the properties of		cposure to this material.		
Emergency / Ingestion: Give one or two glasses of water to drink, Seek medical attention if feeling unwell					
Procedures Inhalation: Remove to fresh air, seek medical attention if irritation develops					
Eye Contact: Wash with copious amounts of water					
5	Skin Contact: Wash with soap and water				

Section VII – Precautions for Safe Handling and Use			
Accidental Release Measures: Wash spilled liquid to drain			
Waste Disposal Method: Disposal by washing to drain 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				
Ventilation	Local Exhaust: None	Special: None		
	Mechanical (General): Adequate	Other: None		
Protective Gloves: None		Eye Protection: Safety glasses or goggles		
Other Protecti	ve Clothing or Equipment: None	•		
Work / Hygienic Practices: Wash with soap and water				

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

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
MannitolConcentration
20%CAS No.
69-65-8H-Statements
NoneSymbols
NoneIngredients 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.

SECTION8 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.

Indestion

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 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)

Non-Domestic Substances List (NDSL)

Listed

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

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Obtained by Global Safety Management, www.globalsafetynet.com (877) 683-7460