SAFETY DATA SHEETS

This SDS packet was issued with item:

078026471

N/A

NEOGEN CORPORATION

MATERIAL SAFETY DATA SHEET

Section I – Product Information			
Product Name or Identity:	AluSpray, AluShield	Emergency Phone No.:	800 424 9300
Manufacturer's Name:	Neogen Corporation	Int'l Emergency Phone No.:	703 527 3887
	944 Nandino Blvd	*Collect Calls Accepted*	
	Lexington, KY 40511	Phone No.:	859 254 1221
Date Prepared or Revised: 05/12/2010		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}
Contains Aluminum Powder 1-5%, CAS 7429-90-5			5 mg/m³	5 mg/m³	No data available
Propane	10-30%	CAS 74-98-6	No data available	2400 ppm	No data available
Isobutane	10-30%	CAS 75-28-5	No data available	800 ppm	No data available
Butane	40-70%	CAS 106-97-8	800 ppm	800 ppm	No data available

Section III – Physical Characteristics	
Boiling Point: N/A	Specific Gravity (H_2O = 1): 0.37
Vapor Pressure (mm Hg.): N/A	Melting Point: N/A
Vapor Density (AIR = 1): 2.5 to 4	Evaporation Rate (Butyl Acetate = 1): N/A
Solubility in Water: Not soluble	
Appearance and Odor: Grey oily liquid (aerosol) with no particular odor.	

Section IV – Fire and Explosion Hazard Data	
Flash Point *(Method Used)*: Aluminum base- >100ºC (212ºF). Propellant is flammable	Flammable Limits: LEL (Lower Explosive Limit) - N/A UEL (Upper Explosive Limit) - N/A
Extinguishing Media: Water, CO2, Dry Chemical	
Special Fire Fighting Procedures: Wear full faceplate and NIOSH-approved self-contained breathing apparatus.	
Unusual Fire and Explosion Hazards: Flammable propellant under pressure.	

Section V – Reactivity Data			
Stability	Unstable		Conditions to Avoid: N/A
	Stable	X	
Incompatibility *(Materials to Avoid)*: Strong oxidizing agents, strong acids.			
Hazardous Decomposition or Byproducts: Carbon monoxide			
Hazardous Polymerization	May Occur		Conditions to Avoid: Avoid breathing sprayed powder. Keep away from ignition sources.
	Will Not Occur	X	

Section VI – Health Hazard Data			
Route(s) of Entry:	Inhalation-Primary	Skin-Minor	Ingestion-Minor
Health Hazards *(Acute and Chronic)*	May cause central nervous system (CNS) depression. May cause headache, nausea, dizziness, vomiting and incoordination. May be irritating to respiratory tract. Consult a physician immediately		
Carcinogenicity: NTP- No (National Toxicology Program)		IARC Monographs-No (International Agency for Research in Cancer)	OSHA Regulated-Yes Flammable Propellant
Signs and Symptoms of Exposure: May cause a mild irritation to skin. Long-term or repeated contact may result in dermatitis(dry, red, cracked skin). May cause redness and swelling on eye contact. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.			
Medical Conditions Generally Aggravated by Exposure: No applicable information found.			
Emergency / First Aid Procedures	Ingestion: NEVER give anything by mouth if victim is rapidly loosing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. Do not induce vomiting. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water. Obtain medical attention immediately.		
	Inhalation: If irritation or difficulty breathing results, give oxygen. If not breathing, give artificial respiration and consult a physician immediately.		
	Eye Contact: Rinse with water for 20 minutes while holding the eyelids open. Seek immediate medical attention..		
	Skin Contact: Wash with soap and water. If irritation persists, seek medical attention.		

Section VII – Precautions for Safe Handling and Use
Accidental Release Measures: Clean up with soap and warm water.
Waste Disposal Method: Take cans to appropriate facility for pressurized can disposal.
Handling and Storing: Use adequate ventilation. Contents under pressure, keep away from heat and flame.
Other Precautions: Keep out of reach of children.

Section VIII – Control Measures		
Respiratory Protection (Specify Type):		
Ventilation	Local Exhaust: Adequate	Special
	Mechanical (General):	Other
Protective Gloves: Yes, to avoid staining hands and clothes.		Eye Protection: N/A
Other Protective Clothing or Equipment: Apron or lab coat to avoid staining clothes.		
Work / Hygienic Practices: Normal work and hygienic practices.		

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

1.1 Product identifier

- Product Name: **AluSpray®**
- Product Part Number(s): **08887**
- Brand(s): NeogenVet®

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

- Use of the substance/preparation: Aerosol bandage for animal use.
- Uses advised against: Not for human use. See label cautions.

1.3 Details of the supplier of the safety data sheet

- Name of Manufacturer: Vétoquinol N.-A. Inc. for Neogen Corporation
- Address of Manufacturer: 944 Nandino Blvd.
  Lexington, Kentucky 40511
  USA
- Telephone: 859/254-1221 • 800/621-8829
- 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)

- Flammable aerosols, Cat. 1, Gases under pressure (Liquefied gas), Hazardous to the aquatic environment, acute hazard, Cat. 1

Classification (WHMIS 2015 HPR)

- Flammable aerosols, Cat. 1, Gases under pressure (Liquefied gas), Hazardous to the aquatic environment, acute hazard, Cat. 1, Simple asphyxiant

Additional information: For full text of Hazard statements: see Section 16.

2.1 Label elements

GHS02 GHS04 GHS09

- Signal Word: Danger
- Symbols: GHS02, GHS04, GHS09
- Hazard phrases
  Extremely flammable aerosol.
  Contains gas under pressure: may explode if heated.
  Very toxic to aquatic life.
- Precautionary Phrases
  Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  Do not spray on an open flame or other ignition source.
  Pressurized container: Do not pierce or burn, even after use.
  Avoid release to the environment.
  Collect spillage. Hazardous to the aquatic environment.
  Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

- May be mildly irritating to skin and eyes.
- May be mildly irritating to respiratory system.

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
Aluminum, powder	1 – 5%	7429-90-5	H228, H400	GHS02, GHS09
Propane	10 – 30%	74-98-6	H220, H280	GHS02, GHS04
Isobutane	10 – 30%	75-28-5	H220, H280	GHS02, GHS04
Butane	40 – 70%	106-97-8	H220, H280	GHS02, GHS04

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

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.
- Contact with skin
  Remove contaminated clothing.
  Contaminated clothing should be laundered before reuse.
  If skin irritation or rash occurs: Get medical advice/attention.
- Contact with eyes
  If substance has gotten into eyes, immediately rinse with plenty of water for at least 15 minutes.
  Irrigate eyes thoroughly while lifting eyelids.
  Seek medical advice if necessary.
- Ingestion
  If swallowed, immediately call a doctor.
  DO NOT INDUCE VOMITING.
  Never make an unconscious or convulsing person vomit or drink fluids.
  Rinse mouth thoroughly with water.
  If medical advice is needed, have product container or label at hand.
- Inhalation
  If breathing is difficult, remove victim 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 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.
- Shield personnel to protect from venting, rupturing, or bursting cans.
- See Section 10.

SECTION 5: Fire-fighting measures (continued)

5.3 Advice for firefighters

- Do not enter fire area without proper protection.
- Move containers from fire area if it can be done without risk.
- Water spray may be useful in cooling equipment and cans exposed to heat and flame.
- Wear proper protective equipment and positive-pressure breathing apparatus with full face-piece.
- Wear protective clothing as per Section 8.

5.4 Hazardous Combustion Products

- May include carbon oxides and other irritant/toxic gases and fumes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Shut off all ignition sources.
- Use non-sparking hand tools.
- Remove contaminated clothing.
- Wear protective clothing as per Section 8.
- 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 container.
- Seal 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

- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
- Do not spray on an open flame or other ignition source.
- Do not pierce or burn, even after use.
- Do not breathe dust/mist/vapors/fumes.
- Avoid contact with eyes and clothing.
- Do not eat, drink or smoke when using this product.
- Wash hands thoroughly after using this substance.

7.2 Conditions for safe storage, including any incompatibilities

- Do not expose to temperatures exceeding 50°C /122°F.
- Protect from sunlight.
- Keep container closed when not in use.
- Empty containers are always dangerous.
- Inspect periodically for damage or leaks.
- Keep out of reach of children.

7.3 Specific end use(s)

- Aerosol bandage for animal use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Basis
Aluminum, powder	7429-90-5	TWA	5 mg/m^3	USA-OSHA Table Z-1 Limits for Air Contaminants - 1910.1000
		TWA	5 mg/m^3	USA-NIOSH Recommended Exposure Limits
		TWA	1 mg/m^3	USA-ACGIH Threshold Limit Values (TLV)
		Remarks	Lower Respiratory Tract irritation, Pneumoconiosis, Neurotoxicity, Not classifiable as a human carcinogen	
Butane	106-97-8	TWA	800 ppm	USA-NIOSH Recommended Exposure Limits
		TWA	1,900 mg/m^3	USA-NIOSH Recommended Exposure Limits
		TWA	1,000 ppm	USA-ACGIH Threshold Limit Values (TLV)
		STEL	1,000 ppm	USA-ACGIH Threshold Limit Values (TLV)
		Remarks	Central Nervous System impairment, Cardiac sensitization	
Isobutane	75-28-5	TWA	800 ppm	USA-NIOSH Recommended Exposure Limits
		TWA	1,900 mg/m^3	USA-NIOSH Recommended Exposure Limits
		TWA	1,000 ppm	USA-ACGIH Threshold Limit Values (TLV)
		Remarks	Central Nervous System impairment, Cardiac sensitization	
Propane	74-98-6	TWA	1,000 ppm	USA-OSHA Table Z-1 Limits for Air Contaminants - 1910.1000
		TWA	1,800 mg/m^3	USA-OSHA Table Z-1 Limits for Air Contaminants - 1910.1000
		TWA	1,000 ppm	USA-NIOSH Recommended Exposure Limits
		TWA	1,800 mg/m^3	USA-NIOSH Recommended Exposure Limits
		TWA	1,000 ppm	USA-ACGIH Threshold Limit Values (TLV)
		Remarks	Central Nervous System impairment, Cardiac sensitization	

8.2 Exposure controls

- Eyewash bottles should be available.
- Engineering controls should be provided to prevent the need for ventilation.
- Respiratory protection is needed if the concentrations are higher than the exposure limits. Use NIOSH-approved respirators if the exposure limits are unknown.
- Wear protective gloves to prevent prolonged or repeated skin contact.
- Wear protective chemical splash goggles, 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 or repeated exposure.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Oily grey liquid
- Odor: No particular odor
- pH: No information available
- Melting Point/Range: No information available
- Boiling Point/Range: No information available
- Flashpoint: No information available
- Evaporation Rate: No information available
- Flammability: Extremely flammable aerosol
- Vapor Pressure: No information available
- Vapor Density: Heavier than air
- Relative Density: 0.37
- Solubility in water: Insoluble
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: No information available

SECTION 9: Physical and chemical properties (continued)

- Viscosity: No information available
- Explosive Properties: No information available
- Oxidizing Properties: No information available

9.2 Other information

- No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

- Does not react under the recommended storage and handling conditions prescribed.

10.2 Chemical stability

- Considered stable under recommended storage and handling conditions prescribed.

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources.
- Do not pierce or burn, even after use.
- Protect from sunlight.
- Do not expose to temperatures exceeding 50°C/122°F.

10.5 Incompatible materials

- Oxidizing materials, acids, etc.

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 = 131.6 mg/m^3 (4h) (inhalation)
- Contact with skin
  May cause redness and irritation in sensitive individuals.
- Contact with eyes
  May cause redness, tearing, and irritation in sensitive individuals.
- Ingestion
  Product is not toxic, but may cause irritation of the throat and/or nausea in sensitive individuals.
- Inhalation
  May cause irritation, coughing, shortness of breath, dizziness, drowsiness, nausea, and/or headaches in sensitive individuals.
- 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

- **Aluminum**
  Toxicity to fish:
  LC50 – Onchorhynchus mykiss (Rainbow trout) = 0.12 mg/L-96h
  mortality LOEC - Ctenopharyngodon idella = 0.1 mg/L-96h

12.2 Persistence and degradability

- No information available

12.3 Bioaccumulation potential

- **Aluminum**
  Bioaccumulation Salvelinus fontinalis = 56d
  Bioconcentration factor (BCF): 36

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

SECTION 13: Disposal considerations

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, puncture, or incinerate empty containers.

SECTION 14: Transport information

14.1 UN Number

- UN1950

14.2 UN Proper Shipping Name

- Aerosols, flammable

14.3 Transport hazard class(es)

- Class 2.1

14.4 Packing group

- Not applicable

14.5 Environmental hazards

- Marine Pollutant

14.6 Special precautions for user

- May also be shipped as a LIMITED QUANTITY in accordance with TDG.

14.7 Domestic Surface Transport (US DOT)

- Proper Shipping Name: Aerosols, flammable
- DOT UN No.: UN1950
- DOT Hazard Class: 2.1
- DOT Packing Group: Not applicable

14.9 Ocean/Sea (IMO/IMDG)

- Proper Shipping Name: AEROSOLS
- IMDG UN No.: UN1950
- IMDG Hazard Class: 2.1
- IMDG Packing Group: Not applicable

14.10 Air (ICAO/IATA)

- Proper Shipping Name: Aerosols, flammable
- ICAO Un No.: UN1950
- ICAO Hazard Class: 2.1
- ICAO Packing Group: Not applicable

SECTION 15: Regulatory information

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

- This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006- 453/2010, WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR), and with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

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)
All components of this material are either listed or exempt from listing on the TSCA Inventory.

State Right-to-Know

Massachusetts
Aluminum, CAS No. 7429-90-5
Butane, CAS No. 106-97-8
Isobutane, CAS No. 75-28-5
Propane, CAS No. 74-98-6

New Jersey
Aluminum, CAS No. 7429-90-5
Butane, CAS No. 106-97-8
Isobutane, CAS No. 75-28-5
Propane, CAS No. 74-98-6

Pennsylvania
Aluminum, CAS No. 7429-90-5
Butane, CAS No. 106-97-8
2-Methyl-propane, CAS No. 75-28-5
Propane, CAS No. 74-98-6

15.3 Canadian Regulatory Information

- This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).
- Hazards not otherwise classified: Simple asphyxiant
- Inventory Status

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

SECTION 16: Other information

Document Number: SDS-9002, AluSpray
Date of Preparation: March 11, 2016
Revision: Rev. 1
Replaces: November 4, 2015

Text not given with phrase codes where they are used elsewhere in this safety data sheet: H220: Extremely flammable gas. H228: Flammable solid. H280: Contains gas under pressure; may explode if heated. H400: Very toxic to aquatic life.

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.