

SAFETY DATA SHEETS

This SDS packet was issued with item:

078930559

N/A

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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Alu-Mend™ Spray

SECTION 1: Identification

Product identifier

Product name: Alu-Mend™ Spray

Product code: 21278832

Recommended use of the product and restriction on use

Relevant identified uses: Topical wound barrier for pets.

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Supplier:

United States

Aspen Veterinary Resources Ltd

3155 W. Heartland Drive

Liberty, MO 64068

1-800-792-1238

Emergency telephone number:

United States

CHEMTREC

Within USA and Canada: 1-800-424-9300 (24 hours)

Outside USA and Canada: +1-703-527-3887 (24 hours)

SECTION 2: Hazard(s) identification

GHS classification:

Flammable aerosols, category 1

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H222 Extremely flammable aerosol

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

P211 Do not spray on an open flame or other ignition source

P251 Pressurized container: Do not pierce or burn, even after use

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Hazards not otherwise classified: None

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SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7429-90-5	Aluminum powder	1-5
CAS number: 74-98-6	Propane	10-30
CAS number: 75-28-5	Isobutane	10-30
CAS number: 106-97-8	Butane	40-70

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

SECTION 4: First aid measures

Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If symptoms develop or persist, seek medical advice/attention.

After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After eye contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Pressurized containers are prone to bursting if mishandled and causing physical injury.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

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Notes for the doctor:

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:

Do not use water jet.

Specific hazards during fire-fighting:

Flammable liquid under pressure. Containers may explode when heated. Ruptured cylinders pose a projectile hazard. Vapor/gas is often heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas and travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create a fire or explosion hazard. Thermal decomposition may produce irritating/toxic fumes/gases.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode. Use shielding to protect against bursting containers.

Special precautions:

Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 800 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Move containers from fire area if safe to do so. Fight fire from a maximum distance. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Do not get on skin, eyes or on clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling. Remove contaminated clothing and launder before reuse.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Avoid breathing dust, mist, fumes, vapors or spray. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

Precautions for safe handling:

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Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools. Do not puncture, pressurize or incinerate. Inspect all cylinders and valves for damage. Make sure cylinders are not giving off an odor or making a hissing sound. Never open a damaged valve. Never tamper with safety devices in cylinders, valves or equipment. Handle containers with caution. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Store upright. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Containers less than 230 liters should be kept in a fire-resistant storage cabinet or inside storage room rated for fire resistance. Do not store near exits or oxygen cylinders. Consider the use of leak detection and alarm equipment. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
OSHA	Aluminum powder	7429-90-5	PEL: 15 mg/m ³ ([Total dust.])
	Aluminum powder	7429-90-5	PEL: 5 mg/m ³ ([Respirable fraction.])
	Aluminum powder	7429-90-5	TWA: 5 mg/m ³ ([Pyrophoric powder.])
	Aluminum powder	7429-90-5	TWA: 5 mg/m ³ ([Respirable dust.])
	Aluminum powder	7429-90-5	TWA: 5 mg/m ³ ([Fume.])
	Aluminum powder	7429-90-5	TWA: 15 mg/m ³ ([Total dust.])
	Propane	74-98-6	TWA: 1000 ppm
	Propane	74-98-6	TWA: 1800 mg/m ³
	Butane	106-97-8	TWA: 800 ppm
	Butane	106-97-8	TWA: 1900 mg/m ³
United States(California)	Aluminum powder	7429-90-5	PEL: 5 mg/m ³
	Aluminum powder	7429-90-5	PEL: 10 mg/m ³
	Propane	74-98-6	8-Hour TWA: 1000 ppm
	Propane	74-98-6	8-Hour TWA: 1800 mg/m ³
NIOSH	Propane	74-98-6	REL: 1000 ppm
	Propane	74-98-6	REL: 1800 mg/m ³
	Propane	74-98-6	IDLH: 2100 ppm
	Isobutane	75-28-5	REL-TWA: 1900 mg/m ³ (800 ppm - up to 10 hr)
	Butane	106-97-8	REL: 800 ppm
	Butane	106-97-8	REL: 1900 mg/m ³

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Butane	106-97-8	IDLH: 1600 ppm
ACGIH	Isobutane	75-28-5	15-Minute STEL: 1000 ppm
	Butane	106-97-8	15-Minute STEL: 1000 ppm

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Grey oily liquid (aerosol)
Odor	No particular odor
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.

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Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	2.5 - 4
Density	Not determined or not available.
Relative density	0.37 (Water=1)
Solubilities	Not soluble in water
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible materials:

Strong oxidizing agents, strong acids.

Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Aluminum powder	oral	LD50 Rat: >15900 mg/kg
Isobutane	inhalation	LC50 Rat: 57,000 ppmV (15 min)
Butane	inhalation	LC50 Rat: >800000 ppmV (15 minutes)

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

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Substance data: No data available.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

OSHA Carcinogens: Not applicable

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Information on likely routes of exposure:

Inhalation, dermal and ingestion.

Symptoms related to the physical, chemical and toxicological characteristics:

May cause central nervous system(CNS) depression. May cause headache, nausea, dizziness, vomiting and

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incoordination. May be irritating to respiratory tract. Consult a physician immediately.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Butane	LC50 Fresh water fish: 24.11 mg/L (96 hours)
	LC50 Daphnid: 14.22 mg/L (48 hours)

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Propane	Readily biodegradable.
Butane	Readily biodegradable.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

Propane	The substance is not PBT.
Butane	Substance is not PBT.

vPvB assessment:

Propane	The substance is not vPvB.
Butane	Substance is not vPvB.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

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Contaminated packages:


Not determined or not applicable.

SECTION 14: Transport information


United States Transportation of dangerous goods (49 CFR DOT)

UN number	1950
UN proper shipping name	Aerosols, flammable
UN transport hazard class(es)	2.1 
Packing group	None
Environmental hazards	None
Special precautions for user	None
Passenger air/rail	75 Kg
Cargo aircraft only	150 Kg
Stowage category	A

International Maritime Dangerous Goods (IMDG)

UN number	1950
UN proper shipping name	Aerosols, flammable
UN transport hazard class(es)	2.1 
Packing group	None
Environmental hazards	None
Special precautions for user	None
EMS number	F-D, S-U
Stowage category	A

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	1950
UN proper shipping name	Aerosols, flammable
UN transport hazard class(es)	2.1 
Packing group	None
Environmental hazards	None
Special precautions for user	None
ERG code	10 L
Excepted quantities	E0
Passenger and cargo	75 Kg
Cargo aircraft only	150 Kg
Limited quantity	30 Kg G

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SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals:

7429-90-5	Aluminum powder	Listed
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CERCLA:

75-28-5	Isobutane	Listed	100 lb
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RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA):

74-98-6	Propane	Listed
75-28-5	Isobutane	Listed
106-97-8	Butane	Listed

Massachusetts Right to Know:

7429-90-5	Aluminum powder	Listed
74-98-6	Propane	Listed
75-28-5	Isobutane	Listed
106-97-8	Butane	Listed

New Jersey Right to Know:

7429-90-5	Aluminum powder	Listed
74-98-6	Propane	Listed
75-28-5	Isobutane	Listed
106-97-8	Butane	Listed

New York Right to Know:

7429-90-5	Aluminum powder	Listed
74-98-6	Propane	Listed
75-28-5	Isobutane	Listed
106-97-8	Butane	Listed

Pennsylvania Right to Know:

7429-90-5	Aluminum powder	Listed
74-98-6	Propane	Listed
75-28-5	Isobutane	Listed
106-97-8	Butane	Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be

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considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 0-4-0

HMIS: 0-4-0

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Revision date: 12.09.2020

Revision Notes:

Revision Date	Notes
2020-12-09	Version 2.

End of Safety Data Sheet