

Most recent as of 1/17/17

Safety Data Sheet**Section 1: Identification****Product identifier****Product Name**

- **Mycodex Plus Environmental Control Aerosol Household Spray**

Synonyms

- 100514689; EPA Reg. No.: 2724-774-43591

Product Description

- Fine white aerosol spray.

Relevant identified uses of the substance or mixture and uses advised against**Recommended use**

- Insect growth regulator.

Restrictions on use

- Keep out of the reach of children. Avoid contact with skin, eyes and clothing. Keep away from heat, sparks and flame. Use in well ventilated area.

Details of the supplier of the safety data sheet**Manufacturer**

- Veterinary Products Laboratories

P.O. Box 34820
Phoenix, AZ 85067-4820
United States

www.vpl.com

Emergency telephone number**Manufacturer**

- 1-888-241-9545

Manufacturer (Transportation) • 1-800-424-9300 - CHEMTREC

Manufacturer (Transportation) • 1-703-527-3887 - CHEMTREC - Outside North America Collect Calls Accepted

Section 2: Hazard Identification**United States (US)**

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture**OSHA HCS 2012**

- Flammable Aerosols 2
Aspiration 1
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
Compressed Gas
Eye Mild Irritation 2B

Label elements**OSHA HCS 2012****DANGER**



- Hazard statements** • Flammable aerosol
 May cause drowsiness or dizziness
 May be fatal if swallowed and enters airways
 Contains gas under pressure; may explode if heated
 Causes eye irritation

Precautionary statements

- Prevention** • Wash thoroughly after handling.
 Avoid breathing dust, fume, gas, mist, vapors and/or spray.
 Use only outdoors or in a well-ventilated area.
 Keep away from heat, sparks, open flames and/or 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.
 Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 Do NOT induce vomiting.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell.
 Call a POISON CENTER or doctor/physician if you feel unwell.
- Storage/Disposal** • Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
 Store locked up.
 Store in a well-ventilated place. Keep container tightly closed.

Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance according to United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Mixtures

Composition		
Chemical Name	Identifiers	%
Permethrin	CAS:52645-53-1	0.2%
Pyriproxyfen	CAS:95737-68-1	0.015%
N-Octyl Bicycloheptene Dicarboximide	CAS:113-48-4	1%
Linalool		1%
Linalool	CAS:78-70-6	1%
Distillates (petroleum), hydrotreated light	CAS:64742-47-8	11%

Propane	CAS:74-98-6	7.59%
Butane	CAS:106-97-8	7.41%
Other ingredients	NDA	Balance

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

- IF ON SKIN: Wash with plenty of soap and water. If irritation or rash occurs, get medical advice/attention.

Eye

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.

Ingestion

- IF SWALLOWED: Aspiration hazard - do NOT induce vomiting. Call a poison control center or doctor immediately for treatment advice.

Most important symptoms and effects, both acute and delayed

- Aspiration hazard, may cause dizziness or drowsiness if inhaled, causes eye irritation. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

- Contains petroleum distillate - vomiting may cause aspiration pneumonia. Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media**
- LARGE FIRE: Water spray, fog or regular foam.
 - SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.

Unsuitable Extinguishing Media

- Avoid heavy hose streams.

Firefighting Procedures

- Flammable aerosols exposed to high temperatures may rupture, rocket and cause secondary hazards.
- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- At temperatures above 130°F, container may rupture.
- Flammable aerosols exposed to high temperatures may rupture, rocket and cause secondary hazards.

Hazardous Combustion Products

- May decompose upon heating to produce toxic gases or fumes.

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Approach leaking or punctured pressurized containers cautiously. Isolate leaking container from all sources of ignition. Avoid breathing fumes. Ventilate enclosed areas.

Emergency Procedures

- As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid unnecessary personnel and equipment traffic in the spill area. Turn off electric power to area.

Environmental precautions

- Avoid run off to waterways and sewers.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Keep away from fire, sparks and heated surfaces.
SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Do not use or store near heat or open flame. Exposure to temperatures above 130°F may cause bursting. Do not smoke while using this product. Do not allow product to freeze. Contents under pressure, do not crush, puncture or incinerate. Avoid breathing fumes.

Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool, dry place. Keep out of reach of children. Keep away from sources of ignition – No Smoking. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep at a temperature not exceeding 120 F. Keep from freezing. NFPA Aerosol Classification: Level 1.

Incompatible Materials or Ignition Sources

- Heat, sparks, open flame.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Butane (106-97-8)	STELs	1000 ppm STEL	Not established	Not established
	TWAs	Not established	800 ppm TWA; 1900 mg/m3 TWA	Not established
Propane (74-98-6)	TWAs	Not established	1000 ppm TWA; 1800 mg/m3 TWA	1000 ppm TWA; 1800 mg/m3 TWA

Exposure Limits Supplemental**ACGIH**

- Propane (74-98-6): **TLV Basis - Critical Effects:** (asphyxia (See Appendix F: Minimal Oxygen Content))
- Butane (106-97-8): **TLV Basis - Critical Effects:** (CNS impairment)

Exposure controls**Engineering Measures/Controls**

- Use adequate ventilation to remove vapors (fumes, dust etc)

Personal Protective Equipment**Pictograms****Respiratory**

- In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

- Wear safety goggles.

Hands

- Wear appropriate gloves.

Skin/Body

- If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

Environmental Exposure Controls

- No data available

Section 9 - Physical and Chemical Properties**Information on Physical and Chemical Properties**

Material Description			
Physical Form	Aerosol	Appearance/Description	Fine white aerosol spray.
Color	White	Odor	Citrus
Aerosol Type	Spray	Odor Threshold	No data available
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	Heat of Decomposition	No data available
pH	Not relevant	Specific Gravity/Relative Density	0.98 g/ml (propellant-free concentrate)
Water Solubility	No data available	Viscosity	No data available
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	VOC (Vol.)	15 % calculated
Flammability			
Flash Point	Not relevant	UEL	No data available
LEL	No data available	Heat of Combustion (ΔH_c)	7.46 kJ/g
Flame Extension	0 in	Flammability (solid, gas)	Flammable aerosol.
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- Stable under normal storage conditions.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Flammable, aerosols exposed to high temperatures may rupture, rocket and cause secondary hazards.

Conditions to avoid

- Heat, sparks, open flame. Excess heat.

Incompatible materials

- Heat, strong acids, strong bases and oxidizing agents.

Hazardous decomposition products

- May decompose upon heating to produce toxic vapors/gases.

Section 11 - Toxicological Information

Information on toxicological effects

	CAS	
Mycodex Plus Environmental Control Aerosol Household Spray	NDA	Acute Toxicity: Ingestion/Oral-Rat LD50 • >5000 mg/kg; Inhalation-Rat LC50 • >2.04 mg/L 4 Hour(s); Skin-Rat LD50 • >2000 mg/kg; Irritation: Eye-Rabbit • Mild irritation; Skin-Rabbit • Mild irritation

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
Skin corrosion/Irritation	OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	OSHA HCS 2012 • Eye Mild Irritation 2B
Skin sensitization	OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Aspiration 1
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	OSHA HCS 2012 • Classification criteria not met
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
STOT-RE	OSHA HCS 2012 • Classification criteria not met

Potential Health Effects

Inhalation

- Acute (Immediate)** • May cause drowsiness and dizziness.
- Chronic (Delayed)** • No data available

Skin

- Acute (Immediate)**
 - May cause mild irritation.
- Chronic (Delayed)**
 - No data available
- Eye**
- Acute (Immediate)**
 - May cause mild irritation.
- Chronic (Delayed)**
 - No data available
- Ingestion**
- Acute (Immediate)**
 - Aspiration Hazard - may be fatal if swallowed and enters airways.
- Chronic (Delayed)**
 - No data available
- Mutagenic Effects**
 - Linalool is not a mutagen. Permethrin was not mutagenic in a battery of in vitro and in vivo tests. Pyriproxyfen has been tested and found negative for mutagenicity potential. N-octyl bicycloheptene dicarboximide was concluded to be negative in the CHO chromosome aberration assay.
- Carcinogenic Effects**
 - Linalool is not classified as carcinogen by NTP, IARC and OSHA. Permethrin is not classified as carcinogen by NTP, IARC and OSHA. Pyriproxyfen is not classified as a carcinogen by IARC, NTP or OSHA. N-octyl bicycloheptene dicarboximide is not listed by IARC, NTP, OSHA or ACGIH as a carcinogen. No other components present at 0.1% or greater are listed by IARC, OSHA or NTP.
- Reproductive Effects**
 - Permethrin does not cause developmental or reproductive effects. Pyriproxyfen is not a teratogen. n-octyl bicycloheptene dicarboximide has been tested and is not a reproductive toxin.

Section 12 - Ecological Information

Toxicity

Components		
Permethrin (0.2%)	52645-53-1	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Blue gill</i> 0.00079 mg/L [Acute] 96 Hour(s) LC50 <i>Atlantic silverside</i> 0.0022 mg/L [Acute] NOEC <i>Fathead minnow</i> 0.0003 mg/L [Chronic] NOEC <i>Sheepshead minnow</i> 0.00083 mg/L [Chronic] Aquatic Toxicity-Crustacea: NOEC <i>Daphnia magna</i> 0.000039 mg/L [Chronic] NOEC <i>Mysid shrimp</i> 0.000011 mg/L [Chronic] LC50 <i>Hexagenia bilineata</i> 0.0001 mg/L [Acute] 96 Hour(s) LC50 <i>Mysid shrimp</i> 0.000019 mg/L [Acute]
Pyriproxyfen (0.015%)	95737-68-1	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow trout</i> >0.325 mg/L [Acute] 96 Hour(s) LC50 <i>Blue gill</i> >0.27 mg/L [Acute] 96 Hour(s) LC50 <i>Sheepshead minnow</i> >1.02 mg/L [Acute] LC50 <i>Rainbow trout</i> 0.09 mg/L [Chronic] Aquatic Toxicity-Crustacea: Water Flea <i>Daphnia magna</i> 0.0054 mg/L [Chronic] 48 Hour(s) LC50 Water Flea <i>Daphnia magna</i> 0.4 mg/L [Acute] 96 Hour(s) LC50 <i>Mysid shrimp</i> >0.092 mg/L [Acute]
N-Octyl Bicycloheptene Dicarboximide (1%)	113-48-4	Aquatic Toxicity-Fish: LC50 1.4-2.4 mg/L [Acute] Aquatic Toxicity-Crustacea: 48 Hour(s) LC50 <i>Daphnia magna</i> 2.3 mg/L [Acute]
Linalool (1%)		Aquatic Toxicity-Fish: LC50 <i>Rainbow Trout</i> >28.8 mg/L [Acute] LC50 <i>Blue gill</i> 36.8 mg/L [Acute]

Persistence and degradability

- No data available

Bioaccumulative potential

- Permethrin has a Log Pow of 6.1, but because of the ease with which biological systems degrade the molecule, the potential for bioconcentration and accumulation in the environment is low (BCF = 500). Permethrin: Bioconcentration factor (BCF) 300; Does not bioaccumulate.

Mobility in Soil

- Permethrin has a high affinity for organic matter (Koc = 86,000), there is little potential for movement in soil or entry into groundwater. Permethrin: Immobile in soil.

Other adverse effects**Potential Environmental Effects**

- No data available.

Section 13 - Disposal Considerations**Waste treatment methods****Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Do not puncture or incinerate.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN1950	Aerosols	2.1	Not Applicable	Not Applicable
IMO/IMDG	UN1950	Aerosols (contains Permethrin and Pyriproxyfen)	2.1	Not Applicable	Marine Pollutant
IATA/ICAO	UN1950	Aerosols, flammable	2.1	Not Applicable	Not Applicable

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Other information

IMO/IMDG • No data available

IATA/ICAO • No data available

Section 15 - Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture**

SARA Hazard Classifications • Acute, SARA Title III Section 313

FIFRA – Pesticide Labeling

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION

Precautionary Statements • KEEP OUT OF THE REACH OF CHILDREN.

Hazards to Humans and Domestic Animals

Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Prolonged or repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or the toilet. Remove contaminated clothing and wash before reuse.

First Aid •

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present after the first 5 minutes then continuing rinsing eye. Call a poison control center or doctor for treatment advice. If swallowed: Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Note to Physician: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

Physical or Chemical Hazards

Contents under pressure. Do not use or store near heat or open flame. Do not puncture or incinerate container. Exposure to temperatures above 130° F may cause bursting. Protect from freezing.

Inventory		
Component	CAS	TSCA
Linalool	78-70-6	Yes
Butane	106-97-8	Yes
Distillates (petroleum), hydrotreated light	64742-47-8	Yes
N-Octyl Bicycloheptene Dicarboximide	113-48-4	No
Permethrin	52645-53-1	No
Propane	74-98-6	Yes
Pyriproxyfen	95737-68-1	No

United States

Environment

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Pyriproxyfen	95737-68-1	Not Listed
• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed

• Permethrin	52645-53-1	1.0 % de minimis concentration
• N-Octyl Bicycloheptene Dicarboximide	113-48-4	Not Listed
• Linalool	78-70-6	Not Listed

Section 16 - Other Information

Revision Date • 15/April/2016

Last Revision Date • 15/April/2016

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