SAFETY DATA SHEETS

This SDS packet was issued with item:

078941178

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

078941157 078941159 078941166 078941168 078941169

Virbac AH, Inc. encourages and expects you to read and understand the entire SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product Name	**SENERGY® (selamectin)**
Recommended use of the chemical and restrictions on use	
Identified uses	Topical application pesticide & anthelminthic agent in treatment of fleas and mites, heartworm prevention and mange-(dogs) and for cats
Restrictions on Use	For veterinary use
Company Identification	Virbac AH, Inc. P.O. Box 162059 Fort Worth, Texas 76161
Customer Information Number	(800) 338-3659
Emergency Telephone Number	
CHEMTREC Number	(800) 424-9300
Other Emergency Number:	Human Toll-free 833-224-2009 Animal Toll-free 833-224-2013
Issue Date	December 20, 2021
Supersedes Date	This is first issue

Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

2. HAZARD IDENTIFICATION

Hazard Classification
Flammable Liquids – Category 2
Reproductive Toxicity – Category 2
Serious Eye Damage/Irritation – Category 2A
Specific Target Organ Toxicity – Single Exposure – Category 3
Acute Aquatic Toxicity – Category 2 (not an OSHA recognized hazard)
Chronic Aquatic Toxicity – Category 2 (not an OSHA recognized hazard)

Label Elements
Hazard Symbols

Signal Word: DANGER

Hazard Statements
Highly flammable liquid and vapor.
Suspected of damaging fertility or the unborn child.
Causes serious eye irritation
May cause drowsiness or dizziness

2. HAZARD IDENTIFICATION

Precautionary Statements
Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash thoroughly after handling.
Avoid breathing mist, spray, vapor.
Use only outdoors or in well ventilated area.
Wear protective gloves, eye protection and face protection.
Keep away from heat, sparks, open flame, hot surfaces. - No smoking.
Keep container tightly closed.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Response
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
If inhaled: Remove to fresh air and keep comfortable for breathing.
If exposed or concerned: Get medical advise/attention.
In case of fire: Use extinguishing measures that appropriate to local circumstances.
Storage
Store in a well-ventilated place.
Keep cool.
Keep container tightly closed.
Store locked up.
Disposal
Dispose of contents/container in accordance with local regulation.
Other Hazards
None

Specific Concentration Limits
The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity	0%
Acute dermal toxicity	0%
Acute inhalation toxicity	0%
Acute aquatic toxicity	0%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:
This product is a mixture.

Component Name	CAS Number	Concentration*	
		120 mg	60 mg
Isopropyl Alcohol	67-63-0	≤ 72.5%	≤ 86.5%
Selamectin	165108-07-6	≤ 14.5%	≤ 7.5%
Butylated hydroxy-toluene	128-37-0	< 0.1%	< 0.1%

*Exact concentration withheld as trade secret.

4. FIRST- AID MEASURES

Description of necessary first-aid measures
Eyes
Immediately flood the eye with plenty of water for at least for several minutes, holding the eye open. Obtain medical attention if symptoms persist.
Skin
Wash skin thoroughly with soap and water. Obtain medical attention if symptoms persist.
Ingestion
Rinse mouth with water. Call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Inhalation
Remove person to fresh air. Seek medical attention if symptoms persist.

Most important symptoms/effects, acute and delayed
Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

Indication of immediate medical attention and special treatment needed
Notes to Physicians
Treat symptomatically. No specific antidote. Barbiturates should be avoided or used with caution.

5. FIRE - FIGHTING MEASURES

Extinguishing Media
Use foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.

Unusual Fire and Explosion Hazards
Vapors can travel a considerable distance to a source of ignition and flashback. Flashback can occur if air temperature exceeds flash point. Be aware of possibility of re-ignition. Can release hazardous vapors during a fire. Do not release contaminated fire water to the environment.

Protective Equipment for Fire-Fighting
Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear appropriate protective clothing. Eliminate all sources of ignition. Use non-sparking tools for flammable materials.

Environmental Precautions
Prevent the material from entering drains or watercourses.

Methods and materials for containment and cleaning up
Wipe up and transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Wear appropriate protective clothing. Do not eat, drink, or smoke during use of product. Avoid contact with eyes. Avoid breathing mists/vapors. Keep treated animals away from fires and ignition sources as a precaution due to high alcohol content of finished product.

7. HANDLING AND STORAGE

Conditions for safe storage
Store in original container at temperatures less than 30°C. Store away from children and pets. Store away from sources of heat or ignition. Storage area should be: cool - dry - well ventilated - away from incompatible materials - out of direct sunlight - away from sources of ignition (heat, sparks, flames, and pilot lights)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure limits are listed below, if they exist.
2-Propanol (Isopropanol)
ACGIH: TLV 200 ppm (492 mg/m^3), 8hr; 15 min STEL 400 ppm (984 mg/m^3)
OSHA PEL: 400 ppm (980 mg/m^3)
Selamectin
OEL (TWA) 0.2 mg/m^3
Butyl-hydroxy-toluene
ACGIH: TLV 2 mg/m^3 IFV Measured as inhalable fraction and vapor

Appropriate engineering controls
Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

Individual protection measures
Respiratory Protection
Finished product does not require respiratory protection under normal conditions of use as long as it is in a well ventilation environment. Wear respiratory protection if there is a risk of exposure in enclosed areas and if working with bulk volumes. A NIOSH approved respirator should be worn. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.
Skin Protection
Gloves
Eye/Face Protection
Safety glasses
Body Protection
Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Liquid
Color	Clear pale yellow

9. PHYSICAL AND CHEMICAL PROPERTIES

Odor	Faint, alcoholic
Odor Threshold	No data available
pH	No data available
Density	No data available
Boiling Range/Point (°C/F)	84°C
Melting Point (°C/F)	No data available
Flash Point (PMCC) (°C/F)	19/66
Vapor Pressure	No data available
Evaporation Rate (BuAc=1)	No data available
Solubility in Water	Miscible
Vapor Density (Air = 1)	No data available
VOC	No data available
Partition coefficient (n-octanol/water)	Log P: 3.1
Viscosity	Not applicable
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Upper explosive limit	No data available
Lower explosive limit	No data available
Flammability (solid, gas)	No data available

10. STABILITY AND REACTIVITY

Reactivity
Product is considered stable.

Chemical Stability
Stable under normal conditions.

Possibility of hazardous reactions
Hazardous polymerization will not occur.

Conditions to Avoid
Heat, sparks, flames - high temperatures - sources of ignition - contact with incompatible materials

Incompatible Materials
Strong acids - strong bases

Hazardous Decomposition Products
Oxides of carbon – organic compounds

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Isopropyl Alcohol
Oral LD50 (rat) >5000 mg/kg
Dermal LD50 (rabbit) 13,900 mg/kg
Inhalation LD50 (rat) >25 mg/l (6h vapor)
Selamectin
Oral LD50 (rat) >1,600 mg/kg

11. TOXICOLOGICAL INFORMATION

Specific Target Organ Toxicity (STOT) – single exposure
Isopropyl alcohol: May cause drowsiness or dizziness.

Specific Target Organ Toxicity (STOT) – repeat exposure
Selamectin: NOAEL(female rat) 5 mg/kg/day (3M). Organs: blood. Liver, GI

Serious Eye damage/Irritation
Selamectin: Causes very slight irritation (rabbit)
Isopropyl alcohol: Can cause serious eye damage.

Skin Corrosion/Irritation
Available data indicates this product is not expected to cause skin irritation.

Respiratory or Skin Sensitization
Selamectin: Not a skin sensitizer (guinea pig)
Isopropyl alcohol: Not a skin sensitizer

Carcinogenicity
Not considered carcinogenic by NTP, IARC, and OSHA.
Butylated hydroxy-toluene: IARC-3 TLV-A4

Germ Cell Mutagenicity
Selamectin: Was found to be negative in the following: Ames Assay; Invitro chromosomal aberration assay; In-vivo micronucleus test; mammalian mutation test.

Reproductive Toxicity
Selamectin: In rat studies of 40-60 mg/kg/day was found to increase incidence of enlarged atria and fibrin in thoracic cavities. Maternal toxicity occurred at 60 mg/kg/day. The NOAEL for maternal toxicity was 40 mg/kg/day. The NOAEL for fetotoxicity was 10 mg/kg/day.

At 60 mg/kg/day in rat fertility study found reduced litter size and fertility. The NOAEL was 10 mg/kg/day

Aspiration Hazard
Finished product is not classified as an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Selamectin: Daphnia magna 48 hr 0.026 microgram/L; Rainbow trout 96 hr 266.0 microgram/L; Green Algae 72 hr >763.0 microgram/L

Mobility in soil
Selamectin: $t_{1/2}$: SOIL (sediment) 1600 days

Persistence/Degradability
Selamectin: $t_{1/2}$: SOIL (surface) 360 days. WATER 180 days.

Bioaccumulative Potential
Selamectin: BCF (estimated) 820

12. ECOLOGICAL INFORMATION

Other adverse effects
Selamectin: Has a low water solubility and binds to soil/sediment and persist

13. DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data	Isopropanol Solution, 3, UN1219, II
UN Proper Shipping Name	Isopropanol Solution
UN Class	(3)
UN Number	UN1219
UN Packaging Group	II
Classification for AIR Transportation (IATA)	Isopropanol Solution, 3, UN1219, II
Classification for Water Transport (IMDG)	Isopropanol Solution, 3, UN1219, II
Marine Pollutant	Selamectin

Note: This product may avail Excepted Quantity or Limited Quantity provisions.

15. REGULATORY INFORMATION

United States TSCA Inventory
All components of this product have not been verified for inventory listing requirements of the US Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

SARA Title III Sect. 311/312 Categorization
Flammable liquid, Serious eye damage or eye irritation, Reproductive Toxicity, Specific target organ toxicity (single exposure)

SARA Title III Sect. 313
This product contains a chemical that is listed in Section 313 at or above de minimis concentrations. The following listed chemicals are present: Isopropanol

16. OTHER INFORMATION

Legend
ACGIH: American Conference of Governmental Industrial Hygienists
BOD: Biological Oxygen Demand
CAS#: Chemical Abstracts Service Number
FIFRA: Federal Insecticide, Fungicide and Rodenticide Act
IARC: International Agency for Research on Cancer
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
N/A: Denotes no applicable information found or available
NTP: National Toxicology Program

16. OTHER INFORMATION

NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act

Revision Date: December 20, 2021
Replaces: This is first issue
Changes made: This is first issue

Information Source and References
This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By: EnviroNet LLC.

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