



VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet

Natural Guard Brand By Ferti-lome Spinosad Bagworm, Tent Caterpillar and Chewing Insect Control Ready To Spray

SECTION 1: Identification

Product identifier

Product name Natural Guard Brand By Ferti-lome Spinosad Bagworm, Tent Caterpillar and Chewing Insect Control Ready To Spray

Other means of identification

EPA Reg. No. 62719-314-7401

Recommended use of the chemical and restrictions on use

Insecticide

Supplier's details

Name Voluntary Purchasing Groups, Inc.
Address 230 FM 87
Bonham, TX 75418
USA

Telephone 855-270-4776

Emergency phone number(s)

In the event of a medical or chemical emergency contact ChemTel, Inc.
North American 1-800-255-3924 or worldwide Intl. + 01-813-248-0585

SECTION 2: Hazard identification

Classification of the substance or mixture

- Eye damage/irritation (chapter 3.3), Cat. 2A

GHS label elements, including precautionary statements

Pictogram



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Signal word

Warning

Hazard statement(s)

H319

Causes serious eye irritation

Precautionary statement(s)

P264

P280

P305+P351+P338

P337+P313

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

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.

Other hazards which do not result in classification

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
Spinosad A & D (Note: Spinosad is comprised of Spinosyn A (CAS #131929-60-7) and Spinosyn D (CAS #131929-63-0))	0.5 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Propylene Glycol (CAS no.: 57-55-6)	15 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Balance	84.5 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

If potential for exposure exists refer to Section 8 for specific personal protective equipment.

If inhaled

Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

In case of skin contact

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.

In case of eye contact

Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

If swallowed

No emergency medical treatment necessary.

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Most important symptoms/effects, acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of immediate medical attention and special treatment needed, if necessary

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

Specific hazards arising from the chemical

Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Special protective actions for fire-fighters

Keep people away. Isolate fire and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

Further information

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.

Methods and materials for containment and cleaning up

Contain spilled material if possible. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

SECTION 7: Handling and storage

Precautions for safe handling

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Keep out of reach of children. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Do not swallow. Wash thoroughly after handling. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage, including any incompatibilities

Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

SECTION 8: Exposure controls/personal protection

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use chemical goggles.

Skin protection

Hand protection: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection: Wear clean, body-covering clothing.

Respiratory protection

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Light Brown Liquid
Odor	Musty
Odor threshold	No data available.
pH	9.19
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	100 °C
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.

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Vapor density	No data available.
Relative density	1.017
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No.
Oxidizing properties	No significant increase (>5C) in temperature.

Other safety information

No data available.

SECTION 10: Stability and reactivity

Reactivity

No data available.

Chemical stability

Thermally stable at recommended temperatures and pressures.

Possibility of hazardous reactions

Polymerization will not occur.

Conditions to avoid

Active ingredient decomposes at elevated temperatures.

Incompatible materials

None known

Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Acute oral toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: Single dose oral LD50 has not been determined. Based on information for component(s): Estimated. LD50, Rat, > 5,000 mg/kg

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined. Based on information for component(s): Estimated. LD50, Rabbit, > 5,000 mg/kg

Acute inhalation toxicity

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No adverse effects are anticipated from single exposure to mist. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

As product: The LC50 has not been determined.

Skin corrosion/irritation

Essentially nonirritating to skin.

Repeated contact may cause flaking and softening of skin.

Serious eye damage/irritation

May cause eye irritation.

May cause slight corneal injury.

Respiratory or skin sensitization

For the active ingredient(s):

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization: No relevant data found.

Carcinogenicity

For the active ingredient(s): For the minor component(s): Did not cause cancer in laboratory animals.

STOT-single exposure

Available data are inadequate to determine single exposure specific target organ toxicity.

STOT-repeated exposure

For the active ingredient(s):

In animals, Spinosad has been shown to cause vacuolization of cells in various tissues.

Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

Aspiration hazard

Based on physical properties, not likely to be an aspiration hazard.

SECTION 12: Ecological information

Toxicity

Acute toxicity to fish

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50, *Lepomis macrochirus* (Bluegill sunfish), 96 Hour, 5.9 mg/l

Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna* (Water flea), 48 Hour, 1.5 mg/l, OECD Test Guideline 202 or Equivalent

EC50, eastern oyster (*Crassostrea virginica*), 0.295 mg/l

Acute toxicity to algae/aquatic plants

EbC50, diatom *Navicula* sp., 5 d, Biomass, 0.107 mg/l

EbC50, *Pseudokirchneriella subcapitata* (green algae), 7 d, 39 mg/l EC50, *Lemna gibba*, 14 d, 10.6 mg/l

Toxicity to bacteria Bacteria, > 100 mg/l

Chronic toxicity to fish

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NOEC, Oncorhynchus mykiss (rainbow trout), flow-through test, mortality, 0.5 mg/l

Chronic toxicity to aquatic invertebrates NOEC, Daphnia magna (Water flea), 0.0012 mg/l

Toxicity to Above Ground Organisms

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg). Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm). oral LD50, Colinus virginianus (Bobwhite quail), > 2000mg/kg bodyweight. dietary LC50, Colinus virginianus (Bobwhite quail), 5 d, > 5253mg/kg diet.

oral LD50, Apis mellifera (bees), 48 Hour, 0.06micrograms/bee
contact LD50, Apis mellifera (bees), 48 Hour, 0.05micrograms/bee

Toxicity to soil-dwelling organisms

LC50, Eisenia fetida (earthworms), 14 d, > 970 mg/kg

Persistence and degradability

Biodegradability: Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%). Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Fail

Biodegradation: < 1 %

Exposure time: 28 d

Method: OECD Test Guideline 301B or Equivalent

Mobility in soil

Spinosad A & D:

Potential for mobility in soil is low (Koc between 500 and 2000). Partition coefficient(Koc): 701 Measured

Propylene glycol:

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient(Koc): < 1 Estimated.

SECTION 13: Disposal considerations

Disposal of the product

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14: Transport information

DOT (US)

Not Regulated for Transport

IMDG

UN Number: UN 3082

Class: 9

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Packing Group: III

EMS Number:

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(spinosad)

IATA

UN Number: UN 3082

Class: 9

Packing Group: III

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.(spinosad)

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

New Jersey Right To Know Components

Common name: PROPYLENE GLYCOL

CAS number: 57-55-6

Pennsylvania Right To Know Components

Chemical name: 1,2-Propanediol

CAS number: 57-55-6

NFPA Rating



SECTION 16: Other information