

1. IDENTIFICATION

Date of issue: July 2015
Product Name: Lawnstar Granular Insecticide
Recommended Use: Insecticide
Restrictions on Use: Activities contrary to label recommendation
EPA Registration No.: 70506-73-829
Company: Southern Agricultural Insecticides, Inc
P.O. Box 218
Palmetto, FL 34220
(941) 722-3285 Chemtrec (800) 424-9300 (24 hour transportation spill response)
Medical: Rocky Mountain Poison Control Center (866) 673-6671 (24hrs)

2. HAZARD(S) IDENTIFICATION**Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Dermal Category 4

Label elements

Signal word: Warning

Emergency Overview

Hazard Statements: Harmful in contact with skin

Precautionary Statements-Prevention:

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

IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor if you feel unwell
Wash contaminated clothing before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION**

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life
- May be harmful in contact with skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %	Trade secret
Bio170 Granules	NA	>40	
Bifenthrin technical	82657-04-3	0.2	
* Crystalline Silica	14808-60-7		

*This product may contain greater than 0.1% crystalline silica. Repeated exposure to high concentrations results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing and repeated, non-specific chest illnesses.

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

FIRST AID MEASURES

- Eye contact** Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or for treatment advice.
- Skin contact** Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.
- Inhalation** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
- Ingestion** Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a physician or poison control center immediately.

Protection of First-aiders Use personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

No information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use: Dry chemical. Carbon dioxide (CO₂). Water spray, alcohol-resistant foam.

Unsuitable extinguishing media: No information available.

Specific hazards arising from the chemical: No information available.

Hazardous combustion products: Carbon monoxide. Carbon dioxide (CO₂). Hydrogen fluoride. Hydrogen chloride.

Explosion data

Protective equipment and precautions for firefighters: Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Avoid contact with the skin and the eyes. Use personal protective equipment. Wear protective gloves/clothing and eye/face protection.

Environmental Precautions: Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Methods and material for containment and cleaning up: Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities:

Storage: Keep containers tightly closed in a cool, well-ventilated place.
incompatible materials: No materials to be especially mentioned.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure guidelines

Exposure Limit Respirable dust

<u>Chemical name</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
Silica Sand	0.025 mg/m ³ -8 hr TWA	0.05 mg/m ³ 8 hr TWA:

Engineering controls: Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection: Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available.

Skin protection: Wear protective gloves/clothing. Socks and footwear.

Respiratory protection: Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	granular
appearance	Off-white
color	No information available
Odor	Slight

Property

<u>Property</u>	<u>VALUES</u>
pH	6.68
Melting point/freezing point	7.68 °C / 46 OF
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability limit in air	
Upper Flammability Limit	No information available
Lower Flammability Limit	No information available
Vapor pressure	No information available

Vapor Density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in Other Solvents	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

OTHER INFORMATION

Softening point	No information available
molecular weight	No information available
VOC Content	No information available
density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity	no data available
Chemical stability	Stable under normal conditions. Hazardous polymerization does not occur.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition.
incompatible materials	No materials to be especially mentioned.
Hazardous decomposition products	Carbon dioxide (CO2). Carbon monoxide. Hydrogen chloride. Hydrogen fluoride.

11. TOXICOLOGICAL INFORMATION

The data on toxicology refer to the active ingredient.

Information on Likely Routes of Exposure

Product information	Lawnstar Acute oral LD50 (rat) >5,000 mg/kg - for similar formulation Acute dermal LD50 (rabbit) >2,000 mg/kg - for bifenthrin
Inhalation	May cause irritation of respiratory tract.
Eye contact	May cause irritation.
Skin contact	May be harmful if absorbed through the skin.
Ingestion	MAY BE HARMFUL IF SWALLOWED.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lawnstar 7631-86-9	> 5000 mg/kg (Rat) (for similar formulation)	> 2000 mg/kg (Rabbit) (for bifenthrin)	NA

Information on Toxicological Effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	The information below indicates whether any agency has listed any ingredient as a carcinocen.

Chemical name	ACGIH	IARC	NTP	OSHA
Silica sand 14808-60-7	-	Group 1	2	-

Reproductive effects	Not Available.
STOT - Single Exposure	No information available.
STOT - repeated exposure	No information available.
Chronic toxicity	Avoid repeated exposure.
Target organ effects	Respiratory System, Eyes.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral	> 5000 mg/kg (rat)
LD50 Dermal	> 2000 mg/kg (rat)

12. ECOLOGICAL INFORMATION

ecotoxicity

Bifenthrin : Highly toxic to fish and aquatic arthropods (LC50 values between 0.0038 to 17.8 ug/L. Slightly toxic to water fowl and upland game birds (LD50 between 1800 to >2150 mg/kg)

Persistence/Degradability No information available.

Bioaccumulation/Accumulation No information available.

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Waste Disposal Method	Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
Contaminated packaging	Refer to product label.

14. TRANSPORT INFORMATION

DOT	NOT REGULATED
TDG	NOT REGULATED
IATA	NOT REGULATED
IMDG/IMO	NOT REGULATED

Quartz is registered on the TSCA chemical inventory. However, it is not regulated.

15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

signal word CAUTION

Ventilation Control PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

Keep out of Reach of Children. Harmful if absorbed through the skin. Extremely toxic to aquatic organisms including fish and invertebrates.

International Inventories

USINV Not determined
DSL/NDSL Not determined
EINECS/ELINCS Does not comply
ENCS Complies
China Complies
KECI Complies
PICCS Does not comply
AICS Does not comply
TSCA Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECI - Korean Existing and Evaluated Chemical Substances
Picca - Philippines Inventory of Chemicals and Chemical Substances
Ales - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values
Bifenthrin technical - 82657-04-3	1.0

SARA 311/312 Hazardous Categorization

Acute health hazard yes
Chronic health hazard yes
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CERCLA

SARA Product RQ 0

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Silica sand 14808-60-7 (>40)			X	
Bifenthrin technical 82657-04-3 (0.2)			X	

State Regulations

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Silica Sand		X			
Bifenthrin technical		X		X	

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-73-829

16. OTHER INFORMATION

NFPA HEALTH 1 Flammability 1 Instability 0 Physical hazard -

Southern Agricultural Insecticides, Inc. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.