

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**

Version 1.0 / USA  
102000032961

1/11

Revision Date: 01/23/2019

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**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE  
COMPANY/UNDERTAKING**

<b>Product identifier</b>	BIOADVANCED SCIENCE-BASED SOLUTIONS
<b>Trade name</b>	HOME PEST BED BUG AND FLEA KILLER CONTINUOUS SPRAY
<b>Product code</b>	
<b>SDS Number</b>	102000032961
<b>EPA Registration No.</b>	92564-59
<b>Relevant identified uses of the substance or mixture and uses advised against</b>	
<b>Use</b>	Insecticide
<b>Restrictions on use</b>	See product label for restrictions.
<b>Information on supplier</b>	
<b>Supplier</b>	SBM Life Science Corp. 1001 Winstead Dr, Ste 500 Cary, NC 27513 United States
<b>Responsible Department</b>	
<b>Emergency Telephone</b>	
<b>Number (24hr/ 7 days)</b>	1-877-229-3763
<b>Product Information</b>	
<b>Telephone Number</b>	1-877-229-3724
<b>Email</b>	SDS@sbm-company.com

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**SECTION 2: HAZARDS IDENTIFICATION**

**Classification in accordance with regulation HCS 29CFR §1910.1200**

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

**Hazards Not Otherwise Classified (HNOC)**

No physical hazards not otherwise classified.

No health hazards not otherwise classified.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**Version 1.0 / USA  
102000032961**2/11**

Revision Date: 01/23/2019

---

<b>Hazardous Component Name</b>	<b>CAS-No.</b>	<b>Concentration % by weight</b>
Imidacloprid	138261-41-3	0.025
Beta-Cyfluthrin	68359-37-5	0.0125

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**SECTION 4: FIRST AID MEASURES****Description of first aid measures**

<b>General advice</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Inhalation</b>	Move 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.
<b>Skin contact</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
<b>Eye contact</b>	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 continue rinsing eye. Call a physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

**Most important symptoms and effects, both acute and delayed****Symptoms** To date no symptoms are known.**Indication of any immediate medical attention and special treatment needed****Treatment** Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

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**SECTION 5: FIREFIGHTING MEASURES****Extinguishing media**

<b>Suitable</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable</b>	None known.

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**

Version 1.0 / USA  
102000032961

**3/11**

Revision Date: 01/23/2019

<b>Special hazards arising from the substance or mixture</b>	Dangerous gases are evolved in the event of a fire.
<b>Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
<b>Further information</b>	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
<b>Flash point</b>	> 93.3 °C
<b>Auto-ignition temperature</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Explosivity</b>	Not applicable

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Precautions** Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

**Methods and materials for containment and cleaning up**

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

**Additional advice** Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

**Reference to other sections** Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.

**Hygiene measures** Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**

Version 1.0 / USA  
102000032961

4/11

Revision Date: 01/23/2019

applying cosmetics.

**Conditions for safe storage, including any incompatibilities**

**Requirements for storage areas and containers** Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Imidacloprid	138261-41-3	50ug/m3 (ST ESL)	07 2011	TX ESL
Imidacloprid	138261-41-3	5ug/m3 (AN ESL)	07 2011	TX ESL
Beta-Cyfluthrin	68359-37-5	5ug/m3 (AN ESL)	03 2014	TX ESL
Beta-Cyfluthrin	68359-37-5	50ug/m3 (ST ESL)	03 2014	TX ESL

**Exposure controls**

**Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**Respiratory protection** Respiratory protection is not required under anticipated circumstances of exposure. When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

**Hand protection** Chemical resistant nitrile rubber gloves

**Eye protection** Safety glasses with side-shields

**Skin and body protection** Wear long-sleeved shirt and long pants and shoes plus socks.

**General protective measures** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**

Version 1.0 / USA  
102000032961

5/11

Revision Date: 01/23/2019

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	white to beige
<b>Physical State</b>	Liquid
<b>Odor</b>	slight
<b>Odour Threshold</b>	No data available
<b>pH</b>	5.7 - 6.7 at 100 %
<b>Vapor Pressure</b>	No data available
<b>Vapor Density (Air = 1)</b>	No data available
<b>Density</b>	1.00 g/cm <sup>3</sup> at 20 °C
<b>Evaporation rate</b>	No data available
<b>Boiling Point</b>	No data available
<b>Melting / Freezing Point</b>	No data available
<b>Water solubility</b>	soluble
<b>Minimum Ignition Energy</b>	Not applicable
<b>Decomposition temperature</b>	Not applicable
<b>Partition coefficient: n-octanol/water</b>	Not applicable
<b>Viscosity</b>	380 mPaxs
<b>Flash point</b>	> 93.3 °C
<b>Auto-ignition temperature</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Explosivity</b>	Not applicable

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**SECTION 10: STABILITY AND REACTIVITY**

<b>Reactivity</b>	
<b>Thermal decomposition</b>	Not applicable
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**Version 1.0 / USA  
102000032961

6/11

Revision Date: 01/23/2019

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<b>Conditions to avoid</b>	freezing
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No decomposition products expected under normal conditions of use.

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**SECTION 11: TOXICOLOGICAL INFORMATION****Exposure routes** Skin Absorption, Eye contact, Inhalation**Immediate Effects****Eye** May cause slight irritation.**Skin** May cause slight irritation.**Inhalation** May cause irritation.**Information on toxicological effects****Acute oral toxicity** LD50 (Rat) > 5,000 mg/kg**Acute inhalation toxicity** LC50 (Rat) > 5.0 mg/l  
Exposure time: 4 h**Acute dermal toxicity** LD50 (Rat) > 5,000 mg/kg**Skin irritation** slight irritation (Rabbit)**Eye irritation** Minimally irritating. (Rabbit)**Sensitisation** Non-sensitizing. (Guinea pig)**Assessment repeated dose toxicity**

Imidacloprid did not cause specific target organ toxicity in experimental animal studies. The toxic effects of Beta-Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

**Assessment mutagenicity**

Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Beta-Cyfluthrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment carcinogenicity**

Imidacloprid was not carcinogenic in lifetime feeding studies in rats and mice.

Beta-Cyfluthrin was not carcinogenic in lifetime feeding studies in rats and mice.

**ACGIH**

None.

**NTP**

None.

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**Version 1.0 / USA  
102000032961

7/11

Revision Date: 01/23/2019

**IARC**

None.

**OSHA**

None.

**Assessment toxicity to reproduction**

Imidacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Imidacloprid is related to parental toxicity. Beta-Cyfluthrin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Beta-Cyfluthrin is related to parental toxicity.

**Assessment developmental toxicity**

Imidacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity. Beta-Cyfluthrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Beta-Cyfluthrin are related to maternal toxicity.

**Further information**

Acute toxicity studies have been bridged from a similar formulation(s).  
The non-acute information pertains to the active ingredient(s).

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**SECTION 12: ECOLOGICAL INFORMATION****Toxicity to fish**

LC50 (Oncorhynchus mykiss (rainbow trout)) 211 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient imidacloprid.

LC50 (Oncorhynchus mykiss (rainbow trout)) 0.000068 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient beta-cyfluthrin.

**Toxicity to aquatic invertebrates**

EC50 (Daphnia magna (Water flea)) 85 mg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient imidacloprid.

LC50 (Chironomus riparius (non-biting midge)) 0.0552 mg/l  
Exposure time: 24 h  
The value mentioned relates to the active ingredient imidacloprid.

EC50 (Daphnia magna (Water flea)) 0.00029 mg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient beta-cyfluthrin.

**Toxicity to aquatic plants**

EC50 (Desmodesmus subspicatus (green algae)) > 10 mg/l  
Growth rate; Exposure time: 72 h

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**

Version 1.0 / USA  
102000032961

8/11

Revision Date: 01/23/2019

	The value mentioned relates to the active ingredient imidacloprid. EC50 (Desmodesmus subspicatus (green algae)) > 0.01 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient beta-cyfluthrin. No acute toxicity was observed at its limit of water solubility.
<b>Biodegradability</b>	Imidacloprid: Not rapidly biodegradable Beta-Cyfluthrin: Not rapidly biodegradable
<b>Koc</b>	Imidacloprid: Koc: 225 Beta-Cyfluthrin: Koc: 508 - 3179
<b>Bioaccumulation</b>	Imidacloprid: Does not bioaccumulate. Beta-Cyfluthrin: Bioconcentration factor (BCF) 506 Does not bioaccumulate.
<b>Mobility in soil</b>	Imidacloprid: Moderately mobile in soils Beta-Cyfluthrin: Immobile in soil
<b>Environmental precautions</b>	Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not apply when weather conditions favor runoff or drift. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Apply this product as specified on the label.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

<b>Product</b>	It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Never place unused product down any indoor or outdoor drain.
<b>Contaminated packaging</b>	Do not re-use empty containers. Place empty container in trash.
<b>RCRA Information</b>	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

**SECTION 14: TRANSPORT INFORMATION**

<b>49CFR</b>	Not dangerous goods / not hazardous material
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**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**

Version 1.0 / USA  
102000032961

9/11

Revision Date: 01/23/2019

**IMDG**

UN number **3082**  
Class 9  
Packaging group III  
Marine pollutant YES  
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(BETA-CYFLUTHRIN SOLUTION)

**IATA**

UN number **3082**  
Class 9  
Packaging group III  
Environm. Hazardous Mark YES  
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(BETA-CYFLUTHRIN SOLUTION )

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

**SECTION 15: REGULATORY INFORMATION**

**EPA Registration No.** 92564-59

**US Federal Regulations**

**TSCA list**

None.

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

None.

**SARA Title III - Section 302 - Notification and Information**

None.

**SARA Title III - Section 313 - Toxic Chemical Release Reporting**

Beta-Cyfluthrin 68359-37-5

**US States Regulatory Reporting**

**CA Prop65**

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**

Beta-Cyfluthrin 68359-37-5 NJ, RI

**Canadian Regulations**

**Canadian Domestic Substance List**

None.

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**

Version 1.0 / USA  
102000032961

10/11

Revision Date: 01/23/2019

**Environmental**

**CERCLA**

None.

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

**EPA/FIFRA 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 required on the pesticide label:

**Hazard statements:** Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

**SECTION 16: OTHER INFORMATION**

**Abbreviations and acronyms**

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	US. IARC Monographs on Occupational Exposures to Chemical Agents
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

**NFPA 704 (National Fire Protection Association):**

Health - 1      Flammability - 1      Instability - 0      Others - none

**HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)**

Health - 1      Flammability - 1      Physical Hazard - 0      PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard



**BIOADVANCED SCIENCE-BASED  
SOLUTIONS HOME PEST BED BUG AND  
FLEA KILLER CONTINUOUS SPRAY**

Version 1.0 / USA  
102000032961

**11/11**

Revision Date: 01/23/2019

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**Reason for Revision:** Update emergency contact and product information number.

**Date of Previous Revision:** 05/01/2017

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