

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

1/10

Revision Date: 01/22/2019

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

Product identifier BIOADVANCED SCIENCE-BASED
Trade name SOLUTIONS COMPLETE BRAND INSECT
KILLER WITH GERM* KILLER

Product code

SDS Number 102000016791

EPA Registration No. 92564-37

Relevant identified uses of the substance or mixture and uses advised against

Use Insecticide

Restrictions on use See product label for restrictions.

Information on manufacturer

SBM Life Science Corp.
1001 Winstead, Ste 500
Cary, NC 27513
United States

**Emergency Telephone
Number (24hr/ 7 days)** 1-877-229-3763

**Product Information
Telephone Number** 1-877-229-3724

SDS Information or Request SDS@sbm-company.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Eye irritation : Category 2B

Signal word: Warning

Hazard statements

Causes eye irritation.

Precautionary statements

Wash hands thoroughly after handling.

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

No other hazards known.

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

2/10

Revision Date: 01/22/2019

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Concentration % by weight |
|-----------------------------------|----------------|----------------------------------|
| (1,1'-Biphenyl)-2-ol, sodium salt | 132-27-4 | 0.3 |
| Beta-Cyfluthrin | 68359-37-5 | 0.05 |

SECTION 4: FIRST AID MEASURES

Description of first aid measures

| | |
|-----------------------|---|
| General advice | When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment. |
| Inhalation | 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. |
| Skin contact | 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. |
| Eye contact | 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. |
| Ingestion | 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. |

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

| | |
|-------------------|---|
| Suitable | Water spray, Foam, Carbon dioxide (CO2), Dry chemical |
| Unsuitable | None known. |

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

3/10

Revision Date: 01/22/2019

Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information Fight fire from upwind position. Keep out of smoke. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Whenever possible, contain fire-fighting water by diking area with sand or earth.

Flash point > 93.3 °C

Autoignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Explosivity not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Isolate hazard area. Keep unauthorized people away. 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.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

4/10

Revision Date: 01/22/2019

clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers 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 |
|-----------------------------------|------------|---------------------|---------|--------|
| Beta-Cyfluthrin (Particulate.) | 68359-37-5 | 5ug/m3 (AN ESL) | 02 2013 | TX ESL |
| Beta-Cyfluthrin (Particulate.) | 68359-37-5 | 50ug/m3 (ST ESL) | 02 2013 | 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 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance white
Physical State liquid
Odor characteristic
Odour Threshold no data available
pH 6.0 - 7.5 at 100 %

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

5/10

Revision Date: 01/22/2019

| | |
|---|-------------------------------------|
| Vapor Pressure | no data available |
| Vapor Density (Air = 1) | no data available |
| Density | ca. 1.00 g/cm ³ at 20 °C |
| Evaporation rate | no data available |
| Boiling Point | no data available |
| Melting / Freezing Point | no data available |
| Water solubility | no data available |
| Minimum Ignition Energy | not applicable |
| Decomposition temperature | not applicable |
| Partition coefficient: n-octanol/water | no data available |
| Viscosity | no data available |
| Flash point | > 93.3 °C |
| Autoignition temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Explosivity | not applicable |

SECTION 10: STABILITY AND REACTIVITY

Reactivity

| | |
|---|--|
| Thermal decomposition | not applicable |
| Chemical stability | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | freezing |
| Incompatible materials | no data available |
| Hazardous decomposition products | No decomposition products expected under normal conditions of use. |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|------------------------|--|
| Exposure routes | Eye contact, Ingestion, Inhalation, Skin contact |
|------------------------|--|

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

6/10

Revision Date: 01/22/2019

Immediate Effects

| | |
|-------------------|------------------------------|
| Eye | Causes eye irritation. |
| Skin | May cause slight irritation. |
| Ingestion | Harmful if swallowed. |
| Inhalation | Harmful if inhaled. |

Information on toxicological effects

| | |
|----------------------------------|---|
| Acute oral toxicity | LD50 (female rat) > 2,000 mg/kg |
| Acute inhalation toxicity | LC50 (rat) > 2.1 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. highest concentration tested No deaths LC50 (rat) > 8.4 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. |
| Acute dermal toxicity | LD50 (rat) > 5,000 mg/kg |
| Skin irritation | Slight irritation (rabbit) |
| Eye irritation | Mild eye irritation. (rabbit) |
| Sensitisation | Non-sensitizing. (guinea pig) |

Assessment repeated dose toxicity

The toxic effects of Beta-Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Assessment mutagenicity

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

Assessment carcinogenicity

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

ACGIH

None.

NTP

None.

IARC

(1,1'-Biphenyl)-2-ol, sodium salt

132-27-4

Overall evaluation: 2B

OSHA

None.

Assessment toxicity to reproduction

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

7/10

Revision Date: 01/22/2019

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

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

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

| | |
|--|--|
| Toxicity to fish | 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)) 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)) > 0.01 mg/l 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. |
| Biodegradability | Beta-Cyfluthrin: not rapidly biodegradable |
| Koc | Beta-Cyfluthrin: Koc: 508 - 3179 |
| Bioaccumulation | Beta-Cyfluthrin: Bioconcentration factor (BCF) 506 Does not bioaccumulate. |
| Mobility in soil | Beta-Cyfluthrin: Immobile in soil |
| Environmental precautions | 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. Apply this product as specified on the label. |

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

8/10

Revision Date: 01/22/2019

| | |
|-------------------------------|--|
| Product | 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. Follow advice on product label and/or leaflet. |
| Contaminated packaging | Do not re-use empty containers. Place empty container in trash. Follow advice on product label and/or leaflet. |
| RCRA Information | 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

| | |
|--------------------------|---|
| 49CFR | Not dangerous goods / not hazardous material |
| 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.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN
POISON

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 92564-37

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

9/10

Revision Date: 01/22/2019

US Federal Regulations

TSCA list

(1,1'-Biphenyl)-2-ol, sodium salt 132-27-4

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

(1,1'-Biphenyl)-2-ol, sodium salt 132-27-4 0.1%

Beta-Cyfluthrin 68359-37-5 25,000lbs

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

(1,1'-Biphenyl)-2-ol, sodium salt 132-27-4

US State Right-To-Know Ingredients

(1,1'-Biphenyl)-2-ol, sodium salt 132-27-4 CA, MN, NJ, RI

Beta-Cyfluthrin 68359-37-5 NJ, RI

Canadian Regulations

Canadian Domestic Substance List

None.

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:

Signal word: Caution!

Hazard statements: Harmful by inhalation and if swallowed.
Causes eye irritation.
Avoid contact with skin, eyes and clothing.
Avoid inhalation of vapour or mist.
Remove and wash contaminated clothing before re-use.

SECTION 16: OTHER INFORMATION

**BIOADVANCED SCIENCE-BASED
SOLUTIONS COMPLETE BRAND
INSECT KILLER WITH GERM* KILLER**

Version 1.0 / USA
102000016791

10/10

Revision Date: 01/22/2019

Abbreviations and acronyms

| | |
|---------|--|
| 49CFR | Code of Federal Regulations, Title 49 |
| ACGIH | US. ACGIH Threshold Limit Values |
| CAS-Nr. | Chemical Abstracts Service number |
| 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 - 2 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

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

Date of Previous Revision: 05/16/2018

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