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

Product identifier
Trade name BAYER ADVANCED HOME PEST CONTROL INDOOR & OUTDOOR INSECT KILLER READY-TO-USE
Product code (UVP) 06464025
SDS Number 102000012003
EPA Registration No. 72155-27

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
Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Emergency telephone no.
Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577 (24 hours/day)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
Acute toxicity (Oral): Category 4

Signal word: Warning
Hazard statements Harmful if swallowed.
Precautionary statements Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.
IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell. Rinse mouth. Dispose of contents/container in accordance with local regulation.

Other hazards
No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS-No.</th>
<th>Concentration % by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta-Cyfluthrin</td>
<td>68359-37-5</td>
<td>0.05</td>
</tr>
</tbody>
</table>

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, Foam, Dry chemical
Unsuitable: None known.

Advice for firefighters

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

Further information: 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.

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: 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: Do not allow product to contact non-target plants. Do not allow to enter soil, waterways or waste water canal. Use personal protective equipment.

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
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 applying cosmetics. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers
Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. 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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
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</thead>
<tbody>
<tr>
<td>Beta-Cyfluthrin</td>
<td>68359-37-5</td>
<td>5ug/m3</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>(Particulate.)</td>
<td></td>
<td>(AN ESL)</td>
<td></td>
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<tr>
<td>Beta-Cyfluthrin</td>
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<td>50ug/m3</td>
<td>02 2013</td>
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<tr>
<td>(Particulate.)</td>
<td></td>
<td>(ST ESL)</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>68359-37-5</td>
<td>0.01 mg/m3</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(TWA)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

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 to light beige
Physical State liquid
Odor characteristic
Odour Threshold no data available
pH 7.8 - 8.2 at (25 °C)
Vapor Pressure no data available
Vapor Density (Air = 1) no data available
Density ca. 1.00 g/cm³ at 20 °C
Evapouration rate no data available
Boiling Point no data available
Melting / Freezing Point no data available
Water solubility soluble
Minimum Ignition Energy not applicable
Decomposition temperature not applicable
Partition coefficient: n-octanol/water no data available
Viscosity 2.0 - 3.0 mPa.s at 23 °C
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  
Ingestion, Inhalation, Eye contact, Skin contact

Immediate Effects  
Eye  
Causes eye irritation.

Ingestion  
Harmful if swallowed.

Inhalation  
Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity  
LD50 (male rat)  3,084 mg/kg  
LD50 (female rat)  1,733 mg/kg

Acute inhalation toxicity  
LC50 (male/female combined rat) > 1.18 mg/l  
Exposure time: 4 h  
Determined in the form of dust.  
Highest attainable concentration.  
(actual)

LC50 (male/female combined rat) > 4.72 mg/l  
Exposure time: 1 h  
Determined in the form of dust.  
Extrapolated from the 4 hr LC50.  
(actual)

Acute dermal toxicity  
LD50 (male/female combined rat) > 2,000 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.
Assessment toxicity to reproduction

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

Acute toxicity studies have not been performed on this product as formulated. Acute toxicity studies have been bridged from a similar formulation(s). 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) > 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
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.

Contaminated packaging
Do not re-use empty containers.
Wrap and discard 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
Environn. 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. 72155-27

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 25,000lbs

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.

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.
- Wash thoroughly with soap and water after handling.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):
- Health - 1
- Flammability - 1
- Instability - 1
- Others - none

- 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: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

Revision Date: 11/06/2014

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.