Annual Integrated Pest Management Notice
For School Year 2019 - 2020

Dear Parent, Guardian, or Staff Member:

This notice is being distributed to comply with the New Jersey School Integrated Pest Management Act. Upper Saddle River School District has adopted an Integrated Pest Management (IPM) Policy and has implemented an IPM Plan to comply with this law. IPM is a holistic, preventive approach to managing pests that is explained further in the schools IPM Policy included with this notice.

All schools in New Jersey are required to have an Integrated Pest Management Coordinator (IPM Coordinator) to oversee all activities related to IPM and pesticide use at the school.

The IPM Coordinator for Bogert School is:

Name of IPM Coordinator: Nijazi Leka

Business Phone number: 201-961-6505

Business Address: 395 W Saddle River Rd. Upper Saddle River NJ 07458

The IPM Coordinator maintains the pesticide product label, and the Material Safety Data Sheet (MSDS) (when one is available), of each pesticide product that may be used on school property. The label and the MSDS are available for review by a parent, guardian, staff member, or student attending the school. Also, the IPM Coordinator is available to parents, guardians, and staff members for information and to discuss comments about IPM activities and pesticide use at the school.

As part of a school pest management plan Upper Saddle River School District may use pesticides to control pests. The United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (DEP) register pesticides to determine that the use of a pesticide in accordance with instructions printed on the label does not pose an unreasonable risk to human health and the environment. Nevertheless, the EPA and the DEP cannot guarantee that registered pesticides do not pose any risk to human health, thus unnecessary exposure to pesticides should be avoided. The EPA has issued the statement that where possible, persons who are potentially sensitive, such as pregnant women, infants and children, should avoid unnecessary pesticide exposure.

The following pesticides have been used at this location in the past 12 months:

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Common Name</th>
<th>EPA Registration #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport GHP</td>
<td>Bifenthrin</td>
<td>F18-56-0A</td>
</tr>
<tr>
<td>Transport Mikron</td>
<td>Bifenthrin</td>
<td>8033-109</td>
</tr>
</tbody>
</table>
Annual Integrated Pest Management Notice
For School Year 2019 - 2020

Dear Parent, Guardian, or Staff Member:

This notice is being distributed to comply with the New Jersey School Integrated Pest Management Act. Upper Saddle River School District has adopted an Integrated Pest Management (IPM) Policy and has implemented an IPM Plan to comply with this law. IPM is a holistic, preventive approach to managing pests that is explained further in the schools IPM Policy included with this notice.

All schools in New Jersey are required to have an Integrated Pest Management Coordinator (IPM Coordinator) to oversee all activities related to IPM and pesticide use at the school.

The IPM Coordinator for Reynolds School is:

Name of IPM Coordinator: _Nijazi Leka_____________________________________

Business Phone number: _201-961-6505_________________________________________________

Business Address: _395 W Saddle River Rd. Upper Saddle River NJ 07458_____________________

The IPM Coordinator maintains the pesticide product label, and the Material Safety Data Sheet (MSDS) (when one is available), of each pesticide product that may be used on school property. The label and the MSDS are available for review by a parent, guardian, staff member, or student attending the school. Also, the IPM Coordinator is available to parents, guardians, and staff members for information and to discuss comments about IPM activities and pesticide use at the school.

As part of a school pest management plan Upper Saddle River School District may use pesticides to control pests. The United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (DEP) register pesticides to determine that the use of a pesticide in accordance with instructions printed on the label does not pose an unreasonable risk to human health and the environment. Nevertheless, the EPA and the DEP cannot guarantee that registered pesticides do not pose any risk to human health, thus unnecessary exposure to pesticides should be avoided. The EPA has issued the statement that where possible, persons who are potentially sensitive, such as pregnant women, infants and children, should avoid unnecessary pesticide exposure.

The following pesticides have been used at this location in the past 12 months:

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Common Name</th>
<th>EPA Registration #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport GHP</td>
<td>Bifenthrin</td>
<td>F18-56-0A</td>
</tr>
<tr>
<td>Transport Mikron</td>
<td>Bifenthrin</td>
<td>8033-109</td>
</tr>
</tbody>
</table>
Annual Integrated Pest Management Notice
For School Year 2019 - 2020

Dear Parent, Guardian, or Staff Member:

This notice is being distributed to comply with the New Jersey School Integrated Pest Management Act. Upper Saddle River School District has adopted an Integrated Pest Management (IPM) Policy and has implemented an IPM Plan to comply with this law. IPM is a holistic, preventive approach to managing pests that is explained further in the schools IPM Policy included with this notice.

All schools in New Jersey are required to have an Integrated Pest Management Coordinator (IPM Coordinator) to oversee all activities related to IPM and pesticide use at the school.

The IPM Coordinator for Cavallini School is:

Name of IPM Coordinator: Nijazi Leka
Business Phone number: 201-961-6505
Business Address: 395 W Saddle River Rd. Upper Saddle River NJ 07458

The IPM Coordinator maintains the pesticide product label, and the Material Safety Data Sheet (MSDS) (when one is available), of each pesticide product that may be used on school property. The label and the MSDS are available for review by a parent, guardian, staff member, or student attending the school. Also, the IPM Coordinator is available to parents, guardians, and staff members for information and to discuss comments about IPM activities and pesticide use at the school.

As part of a school pest management plan Upper Saddle River School District may use pesticides to control pests. The United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (DEP) register pesticides to determine that the use of a pesticide in accordance with instructions printed on the label does not pose an unreasonable risk to human health and the environment. Nevertheless, the EPA and the DEP cannot guarantee that registered pesticides do not pose any risk to human health, thus unnecessary exposure to pesticides should be avoided. The EPA has issued the statement that where possible, persons who are potentially sensitive, such as pregnant women, infants and children, should avoid unnecessary pesticide exposure.

The following pesticides have been used at this location in the past 12 months:

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Common Name</th>
<th>EPA Registration #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tempo Dust</td>
<td>Cyfluthrin</td>
<td>432-1373</td>
</tr>
<tr>
<td>Transport GHP</td>
<td>Bifenethrin</td>
<td>F18-56-0A</td>
</tr>
<tr>
<td>Transport Mikron</td>
<td>Bifenethrin</td>
<td>8033-109</td>
</tr>
</tbody>
</table>
The New Jersey School Integrated Pest Management Act of 2002 requires school districts to implement a school integrated pest management policy that includes an Integrated Pest Management Plan. In accordance with the requirements of the Act, the Board shall ensure implementation of Integrated Pest Management (IPM) procedures to control pests and minimize exposure of children, faculty, and staff to pesticides. These procedures shall be applicable to all school property in the UpperSaddleRiverSchool District.

IPM Coordinator (IPMC)

The Supervisor of Buildings and Grounds shall be designated as the district's Integrated Pest Management Coordinator (IPMC) and is responsible for the implementation of the school integrated pest management policy.

Integrated Pest Management Procedures in Schools

Implementation of Integrated Pest Management (IPM) procedures will determine when to control pests and whether to use mechanical, physical, cultural, biological, or chemical methods. Applying IPM principles prevents unacceptable levels of pest damage by the most economical means and with the least possible hazard to people, property, and the environment.

The Integrated Pest Management Coordinator (IPMC) shall consider the full range of management options, including no action at all. Non-pesticide pest management methods are to be used whenever possible. The choice of using a pesticide shall be based on a review of all other available options and a determination that these options are not effective or not reasonable. When it is determined that a pesticide must be used, low impact pesticides and methods are preferred and shall be considered for use first.

Development of IPM plans

The Superintendent, in collaboration with the school Building Principal(s) and the IPMC, shall be responsible for the development of the IPM Plan for the school district. The school district's Integrated Pest Management (IPM) Plan is a blueprint of how the school district will manage pests through IPM methods. The school district's IPM Plan will state the school district's goals regarding the management of pests and the use of pesticides for all school district property. The Plan will reflect the school district's site-specific needs.
and a description of how each component of the school district’s Integrated Pest Management Policy and Regulation will be implemented for all school property.

Education/Training

The school community will be educated about potential pest problems and IPM methods used to achieve the pest management objectives.

The IPMC, other school staff, and pesticide applicators involved with implementation of the district’s IPM policy will be trained in appropriate components of IPM as it pertains to the school environment.

Pupils and parents/legal guardians will be provided information on this policy and instructed on how they can contribute to the success of the IPM program.

Recordkeeping

Records of pesticide use shall be maintained on site to meet the requirements of the State regulatory agency and the Board.

Records shall also include, but are not limited to, pest surveillance data sheets and other non-pesticide pest management methods and practices utilized.

Notification/Posting

The Building Principal of each school, working with the IPMC, is responsible for timely notification to pupils, parents or legal guardians and the school staff of pesticide treatments pursuant to the School Integrated Pest Management Act.

Re-entry

Re-entry to a pesticide treated area shall conform to the requirements of the School Integrated Pest Management Act.

Pesticide Applicators

The IPMC shall ensure that applicators follow State regulations, including licensing requirements and label precautions, and must comply with all components of the School Integrated Pest Management Policy.

Evaluation
The Superintendent will report annually to the Board on the effectiveness of the IPM Plan and make recommendations for improvement as needed.

The school district’s Integrated Pest Management Plan, Policy and Regulation shall be implemented not later than June 12, 2004. The Board directs the Superintendent to develop Regulations/Procedures for the implementation of School Integrated Pest Management Plan.

N.J.S.A. 13:1F-19 through 13:1F-33

Adopted: 16 June 2008
MATERIAL SAFETY DATA SHEET
TRANSPORT® TERMATICIDE INSECTICIDE

FMC

MSDS Ref. No.: F18-56-0
Date Approved: 06-04/2010
Revision No.: 3

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200. The information contained herein is for the concentrate as packaged, unless otherwise noted.

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TRANSPORT® TERMATICIDE INSECTICIDE

PRODUCT CODE: 6348

ACTIVE INGREDIENT(S): Bifenthrin*: Acetamiprid**

CHEMICAL FAMILY: Pyrethroid*: Neonicotinoid**

MOLECULAR FORMULA: C₂₃H₂₈Cl₂F₅O₇*: C₉H₁₁ClN₄**

SYNONYMS:

FMC 54800: (2-methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate; IUPAC: 2-methyl[biphenyl-3-ylmethyl] (Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate*;
CAS: (1E)-N-[(6-chloro-3-pyridinyl)methyl]-N²-cyano-N-methylacetamide; IUPAC:(E)-N¹-[(6-chloro-3-pyridinyl)methyl]-N²-cyano-N'-methyl**

Information for Bifenthrin*: Information for Acetamiprid**

MANUFACTURER
FMC CORPORATION
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103
(800) 321-362 (General Information)
msdsinfo@fmc.com (Email - General Information)

EMERGENCY TELEPHONE NUMBERS
(800) 331-3148 (Medical - U.S.A. & Canada)
(651) 632-6793 (Medical - Collect - All Other Countries)

For leak, fire, spill, or accident emergencies, call:
(800) 424-9300 (CHEMTREC - U.S.A. & Canada)
(703) 527-3887 (CHEMTREC - Collect - All Other Countries)
2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
- White powder with a faint, slightly sweet odor.
- Slightly combustible. May support combustion at elevated temperatures.
- Thermal decomposition and burning may form toxic by-products.
- For large exposures or fire, wear personal protective equipment.
- May be harmful if swallowed.
- Irritating to the eyes.
- Prolonged repeated exposure to respirable crystalline silica can cause silicosis or possibly cancer. See section 11 for additional details.
- Highly toxic to fish and aquatic organisms. Keep out of drains and water courses.

POTENTIAL HEALTH EFFECTS: Effects from overexposure may result from either swallowing or coming into contact with the skin or eyes. Signs of exposure include anemia, tachypnea, tremors, chromorhinorhrea, lethargy, sagging eyelids, shallow breathing and abdominal bloating. Contact with bifenthrin may occasionally produce skin sensations such as rashes, numbing, burning or tingling. These skin sensations are reversible and usually subside within 12 hours.

MEDICAL CONDITIONS AGGRAVATED: None presently known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Wt.%</th>
<th>EC No.</th>
<th>EC Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifenthrin</td>
<td>82657-04-3</td>
<td>27.27</td>
<td>None</td>
<td>T, Xn, Xi, N; R25-30-43-50/53</td>
</tr>
<tr>
<td>Acetamiprid</td>
<td>135410-20-7</td>
<td>22.73</td>
<td>None</td>
<td>Not classified</td>
</tr>
<tr>
<td>Synthetic amorphous silica</td>
<td>112926-00-8</td>
<td>&lt;33</td>
<td>231-545-4</td>
<td>Not classified</td>
</tr>
<tr>
<td>Surfactant blend</td>
<td>&lt;7.4</td>
<td>None</td>
<td>Not classified</td>
<td></td>
</tr>
<tr>
<td>Silica, quartz</td>
<td>14808-60-7</td>
<td>&lt;0.8</td>
<td>238-878-4</td>
<td>Not classified in Annex 1</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

EYES: Flush with plenty of water. Get medical attention if irritation occurs and persists.

SKIN: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.
INGESTION: Drink plenty of water. Never give anything by mouth to an unconscious person. If any discomfort persists, obtain medical attention.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

NOTES TO MEDICAL DOCTOR: This product has low oral, dermal and inhalation toxicity. It is irritating to the eyes and non-irritating to the skin. Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

---

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, CO₂ or dry chemical. Soft stream water fog only if necessary. Contain all runoff.

FIRE / EXPLOSION HAZARDS: Slightly combustible. This material may support combustion at elevated temperatures.

FIRE FIGHTING PROCEDURES: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

---

6. ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8, "Exposure Controls/Personal Protection". Keep unprotected persons and animals out of the area.

Keep material out of streams and sewers. Large spills should be covered to prevent dispersal. For dry material, use a wet sweeping compound or water to prevent the formation of dust. If water is used, prevent runoff or dispersion of excess liquid by digging and absorbing with a non-combustible absorbent such as clay, sand or soil. Vacuum, shovel or pump waste into a drum and label contents for disposal.

To clean and neutralize contaminated area, scrub area with a solution of detergent (e.g. commercial product such as SuperSoap™, Tide®, Spic and Span®, or other high pH detergent) and water. Let solution sit for 5 minutes. Use a stiff brush to scrub affected area. Repeat if necessary to remove visible staining. Additional decontamination can be made by applying bleach (Clorox® or equivalent) to affected area.

Absorb wash-liquid as noted above, remove visibly contaminated soil and place into recovery / disposal container (plastic, open-top steel drum or equivalent). Place all clean-up material in a container, seal and dispose of in accordance with the method outlined in Section 13 "Disposal Considerations" below.

For further information on spill clean-up, waste disposal, or return of salvaged product, call the FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
7. HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Store in original containers only. Keep out of reach of children and animals. Do not remove packages from container except for immediate use. Do not store at temperatures below 0°C (32°F). Rough handling may cause breakage, especially at low temperatures. Allow to warm above 10°C (50°F) before use. Do not allow inner bags to become wet during storage. Do not handle inner bag with wet hands or wet gloves. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic amorphous silica</td>
<td></td>
<td>(TWA) (80/({% SiO₂}) mg/m³)</td>
<td></td>
</tr>
<tr>
<td>Silica. quartz</td>
<td>0.025 mg/m³ (8-hour TWA)</td>
<td>(10/({% SiO₂ + 2}) mg/m³ (8-hour TWA, respirable dust)) (30/({% SiO₂ + 2}) mg/m³ (8-hour TWA, total dust))</td>
<td></td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS: No open flames. Prevent deposition of dust; use closed system, consider use of dust explosion-proof electrical equipment and lighting. Use local exhaust at all process locations where dust may be emitted. Ventilate all transport vehicles prior to unloading.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For dust exposure, wear chemical protective goggles or a face shield with safety glasses.

RESPIRATORY: APPLICATORS / END-USERS: None required for proper use and handling. ALL OTHERS: For dust exposures wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentrations.

PROTECTIVE CLOTHING: Depending upon concentrations encountered, wear coveralls or long-sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body over barrier suit, such as a rubber rain suit. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them. Leather items - such as shoes, belts and watchbands - that become contaminated should also be removed and destroyed. Launder all work clothing before re-use (separately from household laundry).
GLOVES: Wear chemical resistant, waterproof gloves. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

WORK HYGIENIC PRACTICES: Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum, or using tobacco. Shower at the end of the workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Paint, slightly sweet
APPEARANCE: White powder
DENSITY / WEIGHT PER VOLUME: Loose: 0.1538 g/mL (9.6 lb/cu ft); Tapped: 0.2151 g/mL (13.43 lb/cu ft)
FLASH POINT: Not applicable
MOLECULAR WEIGHT: 422.9 (bifenthrin) 222.7 (acetamiprid)
pH: 7.0 (± 0.5) (1% dispersion)

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Excessive heat and fire.
STABILITY: Stable
POLYMERIZATION: Will not occur
INCOMPATIBLE MATERIALS: Strong bases, acids and oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen fluoride.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Irritating (rabbit)
SKIN EFFECTS: Non-irritating (rabbit)
DERMAL LD₅₀: > 2,000 mg/kg (rabbit)
ORAL LD₅₀: > 550 mg/kg (rat)
INHALATION LC₅₀: > 0.51 mg/l (4 h) (rat) Maximum attainable concentration - zero mortality
SENSITIZATION: (Skin) Non-sensitizing (guinea pig)

ACUTE EFFECTS FROM OVEREXPOSURE: This product has low oral, dermal, and inhalation toxicity. It is irritating to the eyes and non-irritating to the skin. It is non-sensitizing to the skin. No other acute toxicity information is available at this time.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the formulation. In studies with laboratory animals, bifenthrin did not cause reproductive toxicity or teratogenicity. Tremors were associated with repeated exposure of laboratory animals to bifenthrin. In lifetime feeding studies conducted with laboratory animals, a slight increase in the incidence of urinary bladder tumors at the highest dose in male mice was considered to be an equivocal response, not evidence of a clear compound-related effect. The overall absence of genotoxicity has been demonstrated in mutagenicity tests with bifenthrin.

In long term animal feeding studies with Acetamiprid, there was no evidence of carcinogenicity. In reproductive and developmental studies in animals, there was no effect on reproduction. Acetamiprid is not considered a carcinogen, mutagen or reproductive toxicant.

No adverse effects of pulmonary function or lung damage in workers were observed from long-term exposure to dusts of amorphous precipitated silica, silica gel containing no asbestos and <1% crystalline silica.

Repeated overexposure to crystalline silica for extended periods has caused acute silicosis. IARC has classified crystalline silica, inhaled in the form of quartz or cristobalite from occupational sources, as carcinogenic to humans (Group 1). NTP has classified respirable crystalline silica (quartz, cristobalite and tridymite) as 'known to be a human carcinogen'. The American Conference of Governmental Industrial Hygenists (ACGIH) has concluded that silica quartz is a suspected human carcinogen (A2 - limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals with relevance to humans).

CARCINOGENICITY:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic amorphous</td>
<td>3</td>
<td>Not listed</td>
<td>Not listed</td>
<td>(ACGIH) Not listed</td>
</tr>
<tr>
<td>silica</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silica, quartz</td>
<td>1</td>
<td>Known Carcinogen</td>
<td>Not listed</td>
<td>(ACGIH) A2</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No data available for the formulation. Bifenthrin has moderate stability in the soil under aerobic conditions (half-life range from 65 - 125 days depending on soil type) and is stable at a wide range of pH values. Bifenthrin has a high Log Pow (6.6), a high affinity for organic matter, and is not mobile in soil. Therefore, there is little potential for movement into ground water. There is the potential for bifenthrin to bioconcentrate (BCF <2,000).

Acetamiprid degrades rapidly by aerobic soil metabolism. There are no major issues for soil mobility since low use rate and rapid degradation reduce the amount for offsite movement. Environmental residues in drinking water are predicted to be low. Acetamiprid will not bioaccumulate in fish and in sediment, and it poses low risks to the environment relative to most other insecticides.

ECOTOXICOLOGICAL INFORMATION: No data available for the formulation.
Bifenthrin is highly toxic to fish and aquatic arthropods and LC₅₀ values range from 0.0038 to 17.8 μg/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin had no effect on mollusks at its limit of water solubility. Bifenthrin is only slightly toxic to both waterfowl and upland game birds (LD₅₀ values range from 1,800 mg/kg to >2,150 mg/kg).

Aceamiprid use would pose minimal risk to fish and wildlife. Toxicity of Aceamiprid is selective to insects, but some uses may pose a risk to certain non-target aquatic invertebrates. It is only moderately toxic to bees. Aceamiprid use would generally pose low risk to threatened and endangered species, and it would pose minimal risk to non-target plants.

LD₅₀ > 180 mg/kg (oral, Bobwhite quail)
LC₅₀ (48-hour) > 100 mg/L (Carp)
LC₅₀ (24-hour) >200 mg/L (Daphnia magna)
LD₅₀ = 7.1 μg (Honey bee contact)
LC₅₀ (96-hour) = 119.3 g/m² (Rainbow Trout)
EC₅₀ (72-hour) > 98.3 mg/L (Algae)

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

**EMPTY CONTAINER:** Non-returnable containers that held this material should be cleaned, prior to disposal, by triple rinsing. Containers which held this material may be cleaned by being triple-rinsed, and recycled, with the rinse being incinerated. Do not cut or weld metal containers. Vapors that form may create an explosion hazard. If burned, stay out of smoke.

### 14. TRANSPORT INFORMATION

**U.S. DEPARTMENT OF TRANSPORTATION (DOT)**

**PACKAGING TYPE:** Non-Bulk

**PROPER SHIPPING NAME:** Not regulated as a hazardous material

**PACKAGING TYPE:** Bulk

**PROPER SHIPPING NAME:** Environmentally hazardous substance, solid, n.o.s.

**TECHNICAL NAME(S):** Bifenthrin

**PRIMARY HAZARD CLASS / DIVISION:** 9
UN/NA NUMBER: UN 3077
PACKING GROUP: III
MARINE POLLUTANT: Bifenthrin

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

PACKAGING TYPE: Non-Bulk
PROPER SHIPPING NAME: Environmentally hazardous substance, solid, n.o.s.
TECHNICAL NAME(S): Bifenthrin
PRIMARY HAZARD CLASS / DIVISION: 9
UN/NA NUMBER: UN 3077
PACKING GROUP: III
MARINE POLLUTANT: Bifenthrin
ADDITIONAL INFORMATION: EmS Number: F-A, S-F

ADR - EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD

PACKAGING TYPE: Non-Bulk
PROPER SHIPPING NAME: Environmentally hazardous substance, solid, n.o.s.
TECHNICAL NAME(S): Bifenthrin
PRIMARY HAZARD CLASS / DIVISION: 9
CLASSIFICATION CODE: M7
UN/NA NUMBER: UN3077
PACKING GROUP: III
HAZARD IDENTIFICATION NUMBER: 90
ADDITIONAL INFORMATION: Environmentally Hazardous Substance: Bifenthrin

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) / INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

PACKAGING TYPE: Non-Bulk
PROPER SHIPPING NAME: Environmentally hazardous substance,
TECHNICAL NAME(S): Bifenthrin

PRIMARY HAZARD CLASS / DIVISION: 9

UN/NA NUMBER: UN3077

PACKING GROUP: III

ADDITIONAL INFORMATION:

Environmentally Hazardous Substance:
Bifenthrin

OTHER INFORMATION:
HARMONIZED SYSTEM
Import to the U.S.A.: 3808.91.2500
Export from the U.S.A.: 3808.91.0000

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)
SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355, APPENDIX A):
Not listed

SECTION 311 HAZARD CATEGORIES (40 CFR 370):
Immediate, Delayed

SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370):
The Threshold Planning Quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs; however, this product contains the following ingredients with a TPQ of less than 10,000 lbs.: None

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):
This product contains the following ingredients subject to Section 313 reporting requirements:
Bifenthrin

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)
CERCLA DESIGNATION & REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):
Not listed

FEDERAL INSECTICIDE FUNGICIDE RODENTICIDE ACT
U.S. EPA Signal Word: CAUTION
16. OTHER INFORMATION

NFPA

<table>
<thead>
<tr>
<th>Health</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Special</td>
<td>None</td>
</tr>
</tbody>
</table>

No special requirements.

NFPA (National Fire Protection Association)

Degree of Hazard Code:
4 = Extreme
3 = High
2 = Moderate
1 = Slight
0 = Insignificant

REVISION SUMMARY:
This MSDS replaces Revision #2, dated October 22, 2007.
Changes in information are as follows:
Section 1 (Product and Company Identification)
Section 3 (Composition / Information on Ingredients)
Section 8 (Exposure Controls / Personal Protection)
Section 14 (Transport Information)
Section 15 (Regulatory Information)
Section 16 (Other Information)

TRANSPORT - Registered trademark of Nippon Soda Company
FMC Logo - Trademark of FMC Corporation
SuperSoap - Trademark of Weba Technologies, Inc.; Tide - Trademark of Procter and Gamble; Spic and Span: Trademark of The Spic and Span Company; Clorox - Trademark of The Clorox Company

© 2010 FMC Corporation. All Rights Reserved.

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable where such product is used in combination with any other materials or in any process. Use of this product is regulated by the U.S. Environmental Protection Agency (EPA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Further, since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name
TRANSPORT® MIKRON INSECTICIDE

Formula code
006549

Active Ingredient(s)
Bifenthrin, Ace tipmiphrid

Synonyms
BIFENTHRIN: (2-methyl-[1,1'-biphenyl]-3-yl)methyl
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropene carboxylate (CAS name); 2-methylbiphenyl-3-ylmethy1
(Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoro-2-propyl)-2,2-dimethylcyclopropene carboxylate (IUPAC name);

ACETAMIPRID: (E)-1-(6-chloro-3-pyridylmethyl)-N-nitroimidazolidin-2-yldencamline; (2E)-1-[6-chloro-3-pyridylmethyl]-N-nitro-2-imidazolidinimine

Chemical Family
Pyrethroid Pesticide, Neonicotinoid

Recommended Use:
Insecticide

Manufacturer/Supplier
FMC Corporation
Agricultural Solutions
1755 Market Street
Philadelphia, PA 19103

General Information:
Phone: (215) 299-6000
E-Mail: msdsinfo@fmc.com

Emergency telephone number

For leakage, fire, spill or accidental emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

Medical Emergencies:
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)
1 651 / 632-6793 (PROSAR - All Other Countries - Collect)

2. HAZARDS IDENTIFICATION

Appearance
Liquid

Physical State
Liquid

Odor
No Information Available

Potential Health Effects
Skin Contact. Eye Contact. Inhalation. Ingestion

Principal Routes of Exposure

Acute Effects
Skin
Inhalation

Eyes

May cause slight irritation.
Substance may cause slight skin irritation.
Harmful by inhalation. May cause irritation of respiratory tract.
TRANSPORT® MIKRON INSECTICIDE

Ingestion

Harmful if swallowed. May cause central nervous system depression. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects

Bifenthrin: Long-term exposure caused neurotoxicity (tremors and impaired gait) in the early exposure in animal studies, but tremors disappeared with continued exposure. Aectamiprid: Prolonged exposure in animal studies caused nonspecific toxicity observed as decreases in body weight and food consumption.

Environmental Hazard

See Section 12 for additional ecological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifenthrin</td>
<td>82657-94-3</td>
<td>6</td>
</tr>
<tr>
<td>Aectamiprid</td>
<td>133410-20-7</td>
<td>5</td>
</tr>
<tr>
<td>Propylene Carbonate 5</td>
<td>108-32-7</td>
<td>5-10</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

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 further treatment advice.

Eye Contact

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

Inhalation

Move person to fresh air. If person is not breathing, call 911 (within the U.S. and Canada) or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Notes to Physician

This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use CO2, dry chemical, or foam.

Hazardous Combustion Products

Carbon oxides (COx), hydrogen chloride, hydrogen fluoride, chlorine, fluorine.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

NFPA

Health Hazards 2
Flammability 1
Stability 0
Special Hazards -
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Isolate and post spill area. Remove all sources of ignition. Ventilate the area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

Environmental Precautions
Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

Methods for Containment
Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up
Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

Other
For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 “Product and Company Identification” above.

7. HANDLING AND STORAGE

Handling
Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

Storage
Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Keep/Store only in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Occupational exposure controls

Engineering measures
Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Personal protective equipment

General Information
If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

Respiratory Protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

Eye/Face Protection
If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Skin and Body Protection
Wear long-sleeved shirt, long pants, socks, and shoes.

Hand Protection
Protective gloves

Hygiene measures
Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.
9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>5.5</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>110 °C / 230 °F</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>1.064 g/mL (8.89 lb/gal)</td>
</tr>
<tr>
<td>Density</td>
<td>8.885 lb/gal</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>percent volatile</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability Stable.

Conditions to Avoid Heat, flames and sparks.


Hazardous polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Acute toxicity
Large doses of bifenthrin ingested by laboratory animals produced signs of toxicity including convulsions, tremors and bloody nasal discharge. Bifenthrin does not cause acute delayed neurotoxicity. Experience to date indicates that contact with bifenthrin may occasionally produce skin sensations such as rashes, numbing, burning or tingling. These sensations are reversible and usually subside within 12 hours.

Eye Contact Slightly or non-irritating (rabbit)
Skin Contact Slightly or non-irritating (rabbit).

LD50 Dermal > 5,000 mg/kg (rat)
LD50 Oral 1.015 mg/kg (rat)
LC50 Inhalation > 2.2 mg/L 4 hr (rat) - Maximum attainable concentration (zero mortality)

Sensitization Non-sensitizing

Chronic Effects

Chronic toxicity Bifenthrin: Long-term exposure caused neurotoxicity (tremors and impaired gait) in the early exposure in animal studies, but tremors disappeared with continued exposure. Acetamiprid: Prolonged exposure in animal studies caused nonspecific toxicity observed as decreases in body weight and food consumption.

Carcinogenicity Bifenthrin: Weak treatment-related response for liver adenocarcinomas and benign bladder tumors (lesion) in male mice. Acetamiprid: No evidence of carcinogenicity from animal studies.

Mutagenicity Bifenthrin, Acetamiprid: Not genotoxic in laboratory studies.
**TRANSPORT® MIKRON INSECTICIDE**

**Reproductive toxicity**
Bifenthrin: No toxicity to reproduction in animal studies. Acetamiprid: Reductions in pup weight, litter size, viability and weaning indices; delay in sexual maturity endpoints.

**Neurological effects**
Bifenthrin: Causes clinical signs of neurotoxicity (tremors, impaired gait, excessive salivation) following acute or subchronic exposure. Tremors disappeared with continued exposure.
Acetamiprid: Caused clinical signs of neurotoxicity (decreased locomotor activity, tremors) in animal studies.

**Developmental toxicity**
Bifenthrin, Acetamiprid: Not teratogenic in animal studies.

**Target organ effects**
Bifenthrin: Central Nervous System. Acetamiprid: No specific target organ toxicity; the liver effects were considered an adaptive response to chemicals rather than frank toxicity.

---

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects**

<table>
<thead>
<tr>
<th>Bifenthrin (82657-84-3)</th>
<th>Duration</th>
<th>Species</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Ingredient(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>96 h EC50</td>
<td>Fish</td>
<td>0.1</td>
<td>μg/L</td>
</tr>
<tr>
<td>72 h EC50</td>
<td>Algae</td>
<td>0.822</td>
<td>mg/L</td>
<td></td>
</tr>
<tr>
<td>48 h EC50</td>
<td>Crustacea</td>
<td>0.11</td>
<td>μg/L</td>
<td></td>
</tr>
<tr>
<td>21 d NOEC</td>
<td>Fish</td>
<td>0.012</td>
<td>μg/L</td>
<td></td>
</tr>
<tr>
<td>21 d NOEC</td>
<td>Crustacea</td>
<td>0.0013</td>
<td>μg/L</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acetamiprid (135410-20-7)</th>
<th>Duration</th>
<th>Species</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Ingredient(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetamiprid</td>
<td>72 h EC50</td>
<td>Algae</td>
<td>&gt;188.3</td>
<td>mg/L</td>
</tr>
<tr>
<td>96 h LC50</td>
<td>Fish</td>
<td>&gt;100</td>
<td>mg/L</td>
<td></td>
</tr>
<tr>
<td>48 h LC50</td>
<td>Crustacea</td>
<td>49.8</td>
<td>mg/L</td>
<td></td>
</tr>
<tr>
<td>21 d NOEC</td>
<td>Fish</td>
<td>19.2</td>
<td>mg/L</td>
<td></td>
</tr>
<tr>
<td>21 d NOEC</td>
<td>Crustacea</td>
<td>5</td>
<td>mg/L</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to Microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Carbonate S</td>
<td>72 h EC50 &gt; 500 mg/L (EC50)</td>
<td>96 h LC50 &gt; 1000 mg/L (Cyperus carpus)</td>
<td>48 h EC50 &gt; 500 mg/L (Daphnia magna)</td>
<td></td>
</tr>
</tbody>
</table>

**Environmental Fate**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Carbonate S</td>
<td>0.48</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

**Bioaccumulation**
Bifenthrin: The substance has a potential for bioconcentration. Acetamiprid: The substance does not have a potential for bioconcentration.

**Mobility**

---

### 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods**
Improper disposal of excess pesticide, spray mixture, or rinseate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.
TRANSPORT® MIKRON INSECTICIDE

Contaminated Packaging

Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

14. TRANSPORT INFORMATION

DOT

This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

TDG

Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

UN/ID no

UN3082

Proper Shipping Name

Environmentally hazardous substance, liquid, n.o.s.

Hazard class

9

Packing Group

III

Marine Pollutant

Bifenthrin

Description

UN3082. Environmentally hazardous substance, liquid, n.o.s. (Bifenthrin), 9, PGIII, Marine Pollutant

ICAO/DATA

UN/ID no

UN3082

Proper Shipping Name

Environmentally hazardous substance, liquid, n.o.s.

Hazard class

9

Packing Group

III

Marine Pollutant

Bifenthrin

Description

UN3082. Environmentally hazardous substance, liquid, n.o.s. (Bifenthrin), 9, PGIII, Marine Pollutant

IMDG/IMO

UN/ID no

UN3082

Proper Shipping Name

Environmentally hazardous substance, liquid, n.o.s.

Hazard class

9

Packing Group

III

EmS No.

F-A, S-1

Marine Pollutant

Bifenthrin

Description

UN3082. Environmentally hazardous substance, liquid, n.o.s. (Bifenthrin), 9, PGIII, Marine Pollutant

15. REGULATORY INFORMATION

U.S. 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 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifenthrin</td>
<td>92687-04-1</td>
<td>a</td>
<td>10</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

Acute health hazard

Yes

Chronic health hazard

Yes

Fire hazard

No

Sudden release of pressure hazard

No

Reactive hazard

No

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.
International Regulations

Mexico - Grade
Moderate risk, Grade 2

CANADA
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
D2A - Very toxic materials

16. OTHER INFORMATION

Revision date: 2015-03-24
Reason for revision: IMSDS sections updated.

Disclaimer
FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Use of this product is regulated by the U.S. Environmental Protection Agency (EPA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Further, since the conditions and methods of use are beyond the control of FMC Corporation, FMC corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared By:
FMC Corporation

FMC Logo - Trademark of FMC Corporation

© 2015 FMC Corporation. All Rights Reserved.

End of Safety Data Sheet
Bayer Environmental Science
SAFETY DATA SHEET

TEMPO® 1% DUST INSECTICIDE READY TO USE

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

Product identifier

Trade name	TEMPO® 1% DUST INSECTICIDE READY TO USE
Product code (UVP) 05173213
SDS Number 102000006700
EPA Registration No. 432-1373

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)
Product Information Telephone Number 1-800-331-2867
SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
Acute toxicity (Oral) Category 4
Eye irritation: Category 2B

Signal word Warning

Hazard statements
Harmful if swallowed.
Causes eye irritation.

Precautionary statements
Wash 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.
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.
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>Cyfluthrin</td>
<td>68359-37-5</td>
<td>1.00</td>
</tr>
<tr>
<td>Crystalline quartz (respirable)</td>
<td>14808-60-7</td>
<td>4.88</td>
</tr>
<tr>
<td>Calcium sulfate</td>
<td>13397-24-5</td>
<td>89.30</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 Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

Special hazards arising from the substance or mixture

Dangerous gases are evolved in the event of a fire.

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 not applicable

Autoignition temperature no data available

Lower explosion limit not applicable

Upper explosion limit not applicable

Explosivity no data available

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 Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. 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
Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local 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. Before removing gloves clean them with soap and water. 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.

Advice on common storage
Keep away from food, drink and animal feedingstuffs.

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>
</tr>
</thead>
<tbody>
<tr>
<td>Cyfluthrin</td>
<td>68359-37-5</td>
<td>0.01 mg/m3 (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Cyfluthrin (Particulate,)</td>
<td>68359-37-5</td>
<td>5ug/m3 (AN ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Cyfluthrin (Particulate,)</td>
<td>68359-37-5</td>
<td>50ug/m3 (ST ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Crystalline quartz (respirable)</td>
<td>14808-60-7</td>
<td>0.1 mg/m3 (TWA)</td>
<td>1998</td>
<td>JO TLV</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Respirable fraction)</td>
<td>14808-60-7</td>
<td>0.025 mg/m3 (TWA)</td>
<td>02 2012</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Respirable dust)</td>
<td>14808-60-7</td>
<td>0.05 mg/m3 (REL)</td>
<td>2010</td>
<td>NIOSH</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Respirable dust)</td>
<td>14808-60-7</td>
<td>0.1 mg/m3 (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Respirable dust)</td>
<td>14808-60-7</td>
<td>0.1 mg/m3 (TWA)</td>
<td>08 2008</td>
<td>TN OEL</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Particulate)</td>
<td>14808-60-7</td>
<td>14ug/m3 (ST ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Substance</td>
<td>CAS Number</td>
<td>Exposure Limit</td>
<td>Date</td>
<td>OES BCS</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Particulate)</td>
<td>14808-60-7</td>
<td>0.27ug/m³ (AN ESL)</td>
<td>02 2013</td>
<td></td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Total dust)</td>
<td>14808-60-7</td>
<td>0.3 mg/m³ (TWA PEL)</td>
<td>08 2010</td>
<td>US CA OEL</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Respirable dust)</td>
<td>14808-60-7</td>
<td>0.1 mg/m³ (TWA PEL)</td>
<td>08 2010</td>
<td>US CA OEL</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Respirable)</td>
<td>14808-60-7</td>
<td>2.4 millions of particles per cubic foot of air (TWA)</td>
<td>2000</td>
<td>Z3</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Total dust)</td>
<td>14808-60-7</td>
<td>0.1 mg/m³ (TWA)</td>
<td>2000</td>
<td>Z3</td>
</tr>
<tr>
<td>Crystalline quartz (respirable) (Respirable)</td>
<td>14808-60-7</td>
<td>0.3 mg/m³ (TWA)</td>
<td>2000</td>
<td>Z3</td>
</tr>
<tr>
<td>Calcium sulfate (Inhalable fraction)</td>
<td>13397-24-5</td>
<td>10 mg/m³ (TWA)</td>
<td>02 2012</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Calcium sulfate (Total)</td>
<td>13397-24-5</td>
<td>10 mg/m³ (REL)</td>
<td>2010</td>
<td>NIOSH</td>
</tr>
<tr>
<td>Calcium sulfate (Respirable)</td>
<td>13397-24-5</td>
<td>5 mg/m³ (REL)</td>
<td>2010</td>
<td>NIOSH</td>
</tr>
<tr>
<td>Calcium sulfate (Total dust.)</td>
<td>13397-24-5</td>
<td>15 mg/m³ (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>Calcium sulfate (Respirable fraction.)</td>
<td>13397-24-5</td>
<td>5 mg/m³ (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>Calcium sulfate (Total dust.)</td>
<td>13397-24-5</td>
<td>15 mg/m³ (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>Calcium sulfate (Respirable fraction.)</td>
<td>13397-24-5</td>
<td>5 mg/m³ (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>Calcium sulfate</td>
<td>13397-24-5</td>
<td>5 ug/m³ (AN ESL)</td>
<td>03 2012</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Calcium sulfate</td>
<td>13397-24-5</td>
<td>50 ug/m³ (ST ESL)</td>
<td>03 2012</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Silica, amorphous (Particulate.)</td>
<td>7631-86-9</td>
<td>6 mg/m³ (REL)</td>
<td>2010</td>
<td>NIOSH</td>
</tr>
<tr>
<td>Silica, amorphous (Particulate.)</td>
<td>7631-86-9</td>
<td>27ug/m³ (ST ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Silica, amorphous (Particulate.)</td>
<td>7631-86-9</td>
<td>2ug/m³ (AN ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>0.8 mg/m³ (TWA)</td>
<td>2000</td>
<td>Z3</td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>20 millions of particles per cubic foot of air (TWA)</td>
<td>2000</td>
<td>Z3</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
Goggles

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>white to light beige</td>
</tr>
<tr>
<td>Physical State</td>
<td>powder</td>
</tr>
<tr>
<td>Odor</td>
<td>musty</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>pH</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Bulk density</td>
<td>61 lb/ft³ (bulk density tapped)</td>
</tr>
<tr>
<td>35 lb/ft³ (loose)</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Melting / Freezing Point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Water solubility</td>
<td>dispersible</td>
</tr>
<tr>
<td>Minimum Ignition Energy</td>
<td>no data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>ca. 500 °C</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>not applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>not applicable</td>
</tr>
</tbody>
</table>
Flash point: not applicable
Autoignition temperature: no data available
Lower explosion limit: not applicable
Upper explosion limit: not applicable
Explosivity: no data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity
Thermal decomposition: ca. 500 °C

Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
Conditions to avoid: Heat, flames and sparks.
Exposure to moisture.

Incompatible materials: no data available
Hazardous decomposition products: No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Eye contact, Skin Absorption, Ingestion

Immediate Effects
Eye: Moderate eye irritation.
Skin: Can cause irritation to the skin resulting in effects such as burning and/or tingling sensation. May cause irritation, redness. Harmful if absorbed through skin.

Ingestion: Harmful if swallowed.
Inhalation: Harmful if inhaled. May cause upper respiratory tract irritation.

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.
No deaths
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.

Acute dermal toxicity
LD50 (male/female combined rabbit) > 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 Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Assessment Mutagenicity

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

Assessment Carcinogenicity

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

ACGIH
Crystalline quartz (respirable) 14808-60-7 Group A2

NTP
Crystalline quartz (respirable) 14808-60-7 2000

IARC
Crystalline quartz (respirable) 14808-60-7 Overall evaluation: 1

OSHA
None.

Assessment toxicity to reproduction

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 Cyfluthrin is related to parental toxicity.

Assessment developmental toxicity

Cyfluthrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with 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).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish
LC50 (Oncorhynchus mykiss (Rainbow trout)) 0.00047 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient cyfluthrin.

Toxicity to aquatic invertebrates
EC50 (Water flea (Daphnia magna)) 0.00016 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient cyfluthrin.

Toxicity to aquatic plants
IC50 (Desmodesmus subspicatus) > 10 mg/l
Growth rate; Exposure time: 72 h
The value mentioned relates to the active ingredient cyfluthrin.

Biodegradability
Cyfluthrin: not rapidly biodegradable

Koc
Cyfluthrin: Koc: 64300

Bioaccumulation
Cyfluthrin: Bioconcentration factor (BCF) 506; Does not bioaccumulate.

Mobility in soil
Cyfluthrin: Immobile in soil

Environmental precautions
Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
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
Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.
Dispose in accordance with all local, state/provincial and federal regulations.

Contaminated packaging
Do not re-use empty containers.
Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities.
If burned, stay out of smoke.

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
3077
TEMPO® 1% DUST INSECTICIDE READY TO USE

Class
Packaging group
Marine pollutant
Proper shipping name

9
III
YES
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(CYFLUTHRINE MIXTURE)

IATA
UN number
Class
Packaging group
Environm. Hazardous Mark
Proper shipping name

3077
9
III
YES
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(CYFLUTHRINE MIXTURE)

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. 432-1373
US Federal Regulations
TSCA List
Crystalline quartz (respirable) 14808-90-7
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
Cyfluthrin 68359-37-5 10,000 lbs
US States Regulatory Reporting
CA Prop 65
This product contains a chemical known to the State of California to cause cancer.
Crystalline quartz (respirable) 14808-80-7

US State Right-To-Know Ingredients
Cyfluthrin 68359-37-5 NJ
Crystalline quartz (respirable) 14808-80-7 MN

Canadian Regulations
Canadian Domestic Substance List
Crystalline quartz (respirable) 14808-80-7
Calcium sulfate 13397-24-5
Environmental
CERCLA
None.
Clean Water Section 307 Priority Pollutants
None.
Safe Drinking Water Act Maximum Contaminant Levels
None.

International Regulations
European Inventory of Existing Commercial Substances (EINECS)
Cyfluthrin 68359-37-5
Crystalline quartz (respirable) 14808-60-7

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 if swallowed, inhaled or absorbed through the skin.
Moderate eye irritation.
Do not get in eyes, on skin, or on clothing.
Avoid breathing dust.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):
Health - 2 Flammability - 1 Instability - 0 Others - none

Health - 2 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: 09/9/2014

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.