This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200
And Canadian Workplace Hazardous Materials Information System (WHMIS) requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: TRANSPORT® MIKRON INSECTICIDE
Formula code: 006549
Active Ingredient(s): Bifenthrin, Acetamiprid
Synonyms:
- BIFENTHRIN: (2-methyl[1,1′-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate (CAS name);
- 2-methylbiphenyl-3-ylmethyl (Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name);

ACETAMIPRID:
- (E)-1-((6-chloro-3-pyridinyl)methyl)-N-nitroimidazolidin-2-ylideneamine;(2E)-1-[(6-chloro-3-pyridinyl) methyl]-N-nitro-2-imidazolidinimine

Chemical Family: Pyrethroid Pesticide, Neonicotinoid
Recommended Use: Insecticide

Emergency telephone number:
For leak, fire, spill or accident 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: Skin Contact, Eye Contact, Inhalation, Ingestion

Acute Effects:
- Eyes: May cause slight irritation.
- Skin: Substance may cause slight skin irritation.
- Inhalation: Harmful by inhalation. May cause irritation of respiratory tract.
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. Acetamiprid: 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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifenthrin</td>
<td>82657-04-3</td>
<td>6</td>
</tr>
<tr>
<td>Acetamiprid</td>
<td>135410-20-7</td>
<td>5</td>
</tr>
<tr>
<td>Propylene Carbonate S</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 rinsate 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 Decomposition Products
Carbon oxides (COx), Hydrogen chloride, Hydrogen fluoride, Chlorine, Fluorine.

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
1,035 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.
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>Active Ingredient(s)</th>
<th>Duration</th>
<th>Species</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifenthrin (82657-04-3)</td>
<td>96 h LC50</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>Active Ingredient(s)</th>
<th>Duration</th>
<th>Species</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetamiprid (135410-20-7)</td>
<td>72 h EC50</td>
<td>Algae</td>
<td>&gt;98.3</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: 500 mg/L (EC50)</td>
<td>96 h LC50: &gt; 1000 mg/L (Cyprinus carpio)</td>
<td></td>
<td>48 h EC50: 500 mg/L (Daphnia magna)</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
Bifenthrin: Immobile Not expected to reach groundwater. Acetamiprid: Moderately mobile. Has some potential to reach groundwater.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods
Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.
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/IATA

- **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-F
- **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>82657-04-3</td>
<td>6</td>
<td>1.0</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: (MSDS 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