1. PRODUCT AND COMPANY IDENTIFICATION

Product name: TRANSPORT® MIKRON INSECTICIDE
Active Ingredient(s): Bifenthrin, Acetamiprid
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-methylbiphenyl-3-ylmethyl (Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate; (E)-1-(6-chloro-3-pyridinylmethyl)-N-nitroimidazolidin-2-ylidineamine;(2E)-1-{(6-chloro-3-pyridinylmethyl)N-nitro-2-imidazolidinimine
Chemical Family: Pyrethroid Pesticide, Neonicotinoid

Manufacturer: FMC Corporation
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103
General Information:
Phone: (215) 299-6000
E-Mail: msdsinfo@fmc.com

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:
Principle 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: Prolonged exposure may cause chronic effects. See Section 11 for additional Toxicological Information.
Environmental hazard

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 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>Propylene Carbonate S</td>
<td>108-32-7</td>
<td>10-20</td>
</tr>
<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>
</tbody>
</table>

### 4. FIRST AID MEASURES

#### 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.

#### 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 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.

#### Ingestion

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not induce vomiting or give anything by mouth to an unconscious person.

#### 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

#### Flash Point

110 °C / 230 °F

#### Sensitivity to Mechanical Impact

Not applicable

#### Sensitivity to Static Discharge

Not applicable

#### Suitable extinguishing media

Use CO2, dry chemical, or foam.

#### Protective equipment and precautions for firefighters

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

#### NFPA

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Stability</td>
<td>0</td>
</tr>
<tr>
<td>Special Hazards</td>
<td>-</td>
</tr>
</tbody>
</table>
## 6. ACCIDENTAL RELEASE MEASURES

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal precautions</td>
<td>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.</td>
</tr>
<tr>
<td>Environmental precautions</td>
<td>Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.</td>
</tr>
<tr>
<td>Methods for containment</td>
<td>Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.</td>
</tr>
<tr>
<td>Methods for cleaning up</td>
<td>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.</td>
</tr>
<tr>
<td>Other</td>
<td>For further clean-up instructions call FMC Emergency Hotline number listed in Section 1 &quot;Product and Company Identification&quot; above.</td>
</tr>
</tbody>
</table>

## 7. HANDLING AND STORAGE

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling</td>
<td>Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.</td>
</tr>
<tr>
<td>Storage</td>
<td>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. Store in original container only.</td>
</tr>
</tbody>
</table>

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure guidelines</td>
<td>This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.</td>
</tr>
<tr>
<td>Occupational exposure controls</td>
<td></td>
</tr>
<tr>
<td>Engineering measures</td>
<td>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.</td>
</tr>
<tr>
<td>Personal Protective Equipment</td>
<td></td>
</tr>
<tr>
<td>General Information</td>
<td>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.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>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.</td>
</tr>
<tr>
<td>Eye/face protection</td>
<td>For dust, splash, mist or spray exposure, wear chemical protective goggles or a face-shield. Tightly fitting safety goggles.</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>Wear long-sleeved shirt, long pants, socks, shoes, and gloves.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>Protective gloves</td>
</tr>
<tr>
<td>Hygiene measures</td>
<td>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.</td>
</tr>
</tbody>
</table>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on basic physical and chemical properties</td>
<td></td>
</tr>
</tbody>
</table>
**Appearance**
Liquid

**Physical state**
Liquid

**Odor**
No information available.

**pH**
5.5

**Melting Point/Range**
No information available.

**Freezing point**
Not applicable

**Boiling Point/Range**
Not applicable

**Flash Point**
110 °C / 230 °F

**Evaporation rate**
Not applicable

**Vapor pressure**
No information available.

**Vapor density**
1.064 g/mL (8.89 lb/gal)

**Density**
8.885 lb/gal

**Water solubility**
No information available

**Percent volatile**
No information available.

**Partition coefficient:**
Not applicable

**Viscosity**
No data available

**10. STABILITY AND REACTIVITY**

**Stability**
Stable.

**Conditions to avoid**
Heat, flames and sparks.

**Materials to avoid**

**Hazardous decomposition products**
Carbon oxides, 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**
Prolonged exposure may cause chronic effects. See Section 11 for additional Toxicological Information.

**Carcinogenicity**
Bifenthrin, Acetamiprid: No evidence of carcinogenicity from animal studies.

**Mutagenicity**
Bifenthrin, Acetamiprid: Not genotoxic.

**Reproductive toxicity**
Bifenthrin, Acetamiprid: No toxicity to reproduction.

**Neurological Effects**
Tremors were associated with chronic exposure of laboratory animals to bifenthrin, which may disappear with continued exposure.
Developmental Toxicity

Bifenthrin, Acetamiprid: Not teratogenic in animal studies.

Target Organ Effects

Bifenthrin: A slight increase in male mouse urinary bladder tumors at the highest dose was probably not of toxicological concern.

12. ECOLOGICAL INFORMATION

Ecotoxicity

### Bifenthrin (82657-04-3)

<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</td>
<td>EC50</td>
<td>Aquatic organisms</td>
<td>0.11 - 0.57</td>
<td>µg/L</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>96 h LC50</td>
<td>Fish</td>
<td>0.1 - 2.0</td>
<td>µg/L</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>LD50 Oral</td>
<td>Bobwhite quail</td>
<td>&gt;1800</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>LD50 Oral</td>
<td>Mallard duck</td>
<td>&gt;2150</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>LD50</td>
<td>Bee</td>
<td>0.1</td>
<td>µg/bee</td>
</tr>
</tbody>
</table>

### Acetamiprid (135410-20-7)

<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</td>
<td>72 h EC50</td>
<td>Algae</td>
<td>&gt;98.3</td>
<td>mg/L</td>
</tr>
<tr>
<td>Acetamiprid</td>
<td>24 h EC50</td>
<td>Daphnia</td>
<td>&gt;200</td>
<td>mg/L</td>
</tr>
<tr>
<td>Acetamiprid</td>
<td>48 h LC50</td>
<td>Fish</td>
<td>&gt;100</td>
<td>mg/L</td>
</tr>
<tr>
<td>Acetamiprid</td>
<td>LD50</td>
<td>Bee</td>
<td>7.1</td>
<td>µg/bee</td>
</tr>
<tr>
<td>Acetamiprid</td>
<td>LD50</td>
<td>Bobwhite quail</td>
<td>&gt;180</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

### Chemical Name

<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>500 mg/L EC50 72 h</td>
<td>LC50= 5300 mg/L</td>
<td>Oncorhynchus mykiss 96 h</td>
<td>EC50 &gt; 500 mg/L 48 h</td>
</tr>
<tr>
<td></td>
<td>(Desmodesmus subspecificus)</td>
<td>LC50&gt; 1000 mg/L</td>
<td>Lepomis macrochirus 96 h</td>
<td></td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>LC50 0.00001 - 0.00019 mg/L</td>
<td>LC50 &gt; 0.00195 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oncorhynchus mykiss 96 h</td>
<td>Lepomis macrochirus 96 h</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Environmental Fate

### Bifenthrin (82657-04-3)

<table>
<thead>
<tr>
<th>Active Ingredient(s)</th>
<th>Type of Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifenthrin</td>
<td>Bioconcentration factor (BCF)</td>
<td>1709</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>Half-life in soil</td>
<td>~85 days</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>log Pow</td>
<td>6.6</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>Mobility in soil</td>
<td>Not expected to reach groundwater</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>Stability in water</td>
<td>Stable to hydrolysis over a wide range of pH values.</td>
</tr>
</tbody>
</table>

### Acetamiprid (135410-20-7)

<table>
<thead>
<tr>
<th>Active Ingredient(s)</th>
<th>Type of Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetamiprid</td>
<td>Bioconcentration factor (BCF)</td>
<td>Low bioaccumulation potential</td>
</tr>
</tbody>
</table>

### Chemical Name

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Carbonate S</td>
<td>0.48</td>
</tr>
</tbody>
</table>

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

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

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

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
- Slight risk, Grade 1

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
- Non-controlled

16. OTHER INFORMATION

Revision Date: 2013-10-11
Reason for revision: (M)SDS 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

© 2013 FMC Corporation. All Rights Reserved.

End of Material Safety Data Sheet