Material Safety Data Sheet
TRANSPORT® MIKRON INSECTICIDE

MSDS #: 6549-A

Revision Date: 2013-10-11
Version 1.01

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

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-pyridylmethyl)-N-nitroimidazolidin-2-ylideneamine;(2E)-1-[(6-chloro-3-pyridinyl)methyl]-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

Chemical Name	CAS-No	Weight %
Propylene Carbonate S	108-32-7	10-20
Bifenthrin	82657-04-3	6
Acetamiprid	135410-20-7	5

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

Health Hazard	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. Store in original container only.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure guidelines This product 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 For dust, splash, mist or spray exposure, wear chemical protective goggles or a face-shield. Tightly fitting safety goggles

Skin and body protection Wear long-sleeved shirt, long pants, socks, shoes, and gloves.

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

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	Strong oxidizing agents. Strong acids. Strong bases.
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)				
Active Ingredient(s)	Duration	Species	Value	Units:
Bifenthrin	EC50	Aquatic organisms	0.11 - 0.57	µg/L
Bifenthrin	96 h LC50	Fish	0.1 - 2.0	µg/L
Bifenthrin	LD50 Oral	Bobwhite quail	>1800	mg/kg
Bifenthrin	LD50 Oral	Mallard duck	>2150	mg/kg
Bifenthrin	LD50	Bee	0.1	µg/bee

Acetamiprid (135410-20-7)				
Active Ingredient(s)	Duration	Species	Value	Units:
Acetamiprid	72 h EC50	Algae	>98.3	mg/L
	24 h EC50	Daphnia	>200	mg/L
	48 h LC50	Fish	>100	mg/L
	LD50	Bee	7.1	µg/bee
	LD50	Bobwhite quail	>180	mg/kg

Chemical Name	**Toxicity to algae**	**Toxicity to fish**	**Toxicity to microorganisms**	**Toxicity to daphnia and other aquatic invertebrates**
Propylene Carbonate S	500 mg/L EC50 72 h (Desmodesmus subspicatus)	LC50= 5300 mg/L Leuciscus idus 96 h LC50> 1000 mg/L Cyprinus carpio 96 h		EC50 > 500 mg/L 48 h
Bifenthrin		LC50 0.0001 - 0.00019 mg/L Oncorhynchus mykiss 96 h LC50 0.0003 - 0.00038 mg/L Lepomis macrochirus 96 h		EC50 0.00135 - 0.00195 mg/L 48 h

Environmental Fate

Bifenthrin (82657-04-3)		
Active Ingredient(s)	Type of Test	Result
Bifenthrin	Bioconcentration factor (BCF)	1709
Bifenthrin	Half-life in soil	~85 days
Bifenthrin	log Pow	6.6
Bifenthrin	Mobility in soil	Not expected to reach groundwater
Bifenthrin	Stability in water	Stable to hydrolysis over a wide range of pH values.

Acetamiprid (135410-20-7)		
Active Ingredient(s)	Type of Test	Result
Acetamiprid	Bioconcentration factor (BCF)	Low bioaccumulation potential

Chemical Name	**log Pow**
Propylene Carbonate S	0.48

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:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Bifenthrin	82657-04-3	6	1.0

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.

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End of Material Safety Data Sheet