

MATERIAL SAFETY DATA SHEET

Fanfare® 2EC

Page 1 of 5

1. IDENTIFICATION

Product name: **Fanfare® 2EC**
 Chemical name of active ingredient(s): Bifenthrin: 2 methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-cyclopropanecarboxylate
 Manufacturer: Makhteshim Agan of North America, Inc.
 4515 Falls of Neuse Road, Suite 300
 Raleigh, NC 27609
 Phone: 919-256-9300
 Phone: 1-800-535-5053
 For fire, spill, and/or leak emergencies, contact Infotrac:
 For medical emergencies and health and safety inquiries, contact Prosar: Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA/PEL	ACI/TLV	OTHER	NTP/IARC/OSHA (Carcinogenicity)
Bifenthrin	82657-04-3	25.1	NA	NA	NA	NA
Inert ingredients including:		74.9				
Aromatic hydrocarbons	64742-94-5		100 ppm	NA	NA	NA

NA=Not available

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES

Appearance: Amber liquid

Odor: Aromatic hydrocarbons

EMERGENCY OVERVIEW Warning. May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

POTENTIAL HEALTH EFFECTS:

Eye: Causes severe eye irritation.

Skin: Harmful if absorbed through the skin. Causes moderate skin irritation. Avoid contact with skin, eyes, or clothing.

Inhalation: Harmful if inhaled; avoid breathing vapor or spray mist.

Ingestion: May be fatal if swallowed.

SYMPTOMS OF ACUTE EXPOSURE

Large doses may cause incoordination, tremor, salivation, vomiting, diarrhea and irritability to sound and touch.

4. FIRST AID MEASURES

FIRST AID

IF SWALLOWED:	<ul style="list-style-type: none"> Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> 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.

	<ul style="list-style-type: none"> • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • 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.
IF INHALED:	<ul style="list-style-type: none"> • Move person 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 poison control center or doctor for further treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-250-9291 for emergency medical treatment information.</p> <p>NOTE 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 should be avoided. This product contains a petroleum distillate; vomiting may cause aspiration pneumonia.</p>	

5. FIRE FIGHTING MEASURES

FLASH POINT: 65°C (149° F) (Pensky-Martens Closed Cup)

FLAMMABLE LIMITS: LFL/UFL: Not available

EXTINGUISHING MEDIA: Foam, CO₂, dry chemical

FIRE & EXPLOSION HAZARDS: Moderately combustible. Found not to be explosive. Do not use or store near heat or open flame.

FIRE-FIGHTING PROCEDURES: Isolate fire area. Do not breathe smoke, gases or vapors generated.

FIRE-FIGHTING EQUIPMENT: Wear self-contained breathing apparatus and full-protective clothing.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Clean up spills immediately, using precautions described in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Keep material out of lakes, streams, ponds and sewer drains. To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay; if dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Do not allow material to run off into soil, drainage systems, or bodies of water. Notify and consult with proper regulatory authorities.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

PRECAUTIONS TO BE TAKEN IN STORAGE: Do not allow product to freeze. Do not store below 40° F (4° C). If crystals are observed, warm material to above 60° F (16° C) by placing container in warm location. Shake or roll periodically to redissolve solids. Keep out of reach of children and animals. Store in original container only. Store in cool, dry place and avoid excessive heat. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

STORAGE TEMPERATURE (MIN/MAX): Do not store below 40° F (4° C)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Protective eyewear.

SKIN PROTECTION: Long-sleeved shirt and long pants. Shoes plus socks.

HAND PROTECTION: Chemical-resistant gloves, such as barrier laminate, nitrile rubber, neoprene rubber, or Viton.

RESPIRATOR REQUIREMENTS: Not required – Use normal safety precautions.

ADDITIONAL PROTECTIVE MEASURES: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

EXPOSURE GUIDELINES: Refer to Section 2.

ENGINEERING CONTROLS: Use adequate ventilation to minimize airborne concentrations of this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Amber liquid

ODOR: Aromatic hydrocarbon

FLASH POINT: 65°C (149° F) (Pensky-Martens Closed Cup)

pH: 5.77

VISCOSITY: 4.415(20°C) & 2.739 (40°C)

MISCIBILITY: Product is miscible in oil

SOLUBILITY IN WATER: Soluble

DENSITY: 0.976 g/ml

OXIDIZING OR REDUCING ACTIVITY: Compatible with water, 10% monoammonium phosphate solution, iron powder and Kerosene. Incompatible with 10% potassium permanganate solution

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal use and storage conditions.

CONDITIONS TO AVOID: Excessive heat and fire.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

Acute Oral LD50 (Rat): 149.6 mg/kg

Acute Dermal LD50 (Rabbit): > 2,000 mg/kg

Acute Inhalation LC50 (Rat): > 2.06 mg/L (4 hrs.)

Eye Irritation (Rabbit): Severely irritating

Skin Irritation (Rabbit): Moderately irritating

Dermal Sensitization (Guinea Pig): Not a contact sensitizer

MUTAGENIC POTENTIAL:

Bifenthrin: None observed.

TERATOGENIC EFFECTS:

Bifenthrin: None observed.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas

MATERIAL SAFETY DATA SHEET

Fanfare® 2EC

Page 4 of 5

where surface water is present, or to intertidal areas below the mean high water mark. Do not make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

ECOTOXICOLOGY:

Bifenthrin is very highly toxic to fish, crustaceans and aquatic animals. Care should be taken to avoid contamination of the aquatic environment. LC₅₀: 0.00015 mg/L (rainbow trout), 0.00035 mg/L (bluegill), 0.0016 mg/L (daphnia).

Bifenthrin is moderately toxic to many species of bird.

LC₅₀: 1,280 ppm (mallard duck); 4,450 ppm (bobwhite quail).

LD₅₀: 2,150 mg/kg (mallard duck); 1,800 mg/kg (bobwhite quail),

Bifenthrin is toxic to bees.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

UN 3352, Pyrethroid pesticides, liquid, toxic, 6.1, PGIII

NOTE: Combination packages with inner packagings less than 4 liters (1.057 gallons) may be reclassified as a Consumer Commodity (ORM-D). These packages cannot be shipped by air freight.

NOTE: Consumer Commodity (ORM-D) classification is for domestic surface/ground shipments only (4x1-gallon and 4x1-quart packages). Air shipments remain regulated.

INTERNATIONAL TRANSPORTATION:

IMO (vessel): UN 3352, Pyrethroid pesticides, liquid, toxic (bifenthrin), 6.1, PGIII, Marine Pollutant

IATA (air): UN 3352, Pyrethroid pesticides, liquid, toxic (bifenthrin), 6.1, PGIII

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Chronic health hazard (delayed)

Section 313: Bifenthrin (CAS # 82657-04-3) 25.1%

CA PROPOSITION 65: Not applicable

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or exempt.

16. OTHER INFORMATION

HAZARD RATINGS **NFPA** **HMIS**

MATERIAL SAFETY DATA SHEET

Fanfare® 2EC

Page 5 of 5

HEALTH:	2	2	0	MINIMAL
FLAMMABILITY:	1	1	1	SLIGHT
REACTIVITY:	0	0	2	MODERATE
			3	HIGH
			4	SEVERE

MSDS Date: 7-31-08; Supersedes versions dated: 3-14-08 and 5-24-04. Changes made to Section 13 and 14.

The information herein is given in good faith, but no warrant, express or implied, is made. Consult Makhteshim Agan of North America, Inc. for further information.