MATERIAL SAFETY DATA SHEET

FLUORGUARD™ ANT BAIT STATION INSECTICIDE

MSDS Ref. No.: 4151-50-2-2
Date Approved: 08/18/2004
Revision No.: 4

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the EC directive, 2001/58/EC and other regulatory requirements. The information contained herein is for the concentrate as packaged, unless otherwise noted.

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	FLUORGUARD™ ANT BAIT STATION INSECTICIDE
PRODUCT CODE:	1535
ACTIVE INGREDIENT(S):	Sulfluramid
CHEMICAL FAMILY:	Fluoroaliphatic sulfonamide
MOLECULAR FORMULA:	$C_{10}H_6F_{17}NO_2S$ (sulfluramid)
SYNONYMS:	FMC 66898; GX071; F1898; N-ethyl perfluorooctanesulfonamide; IUPAC: N-ethyl perfluoro-octane-1-sulfonamide

MANUFACTURER

FMC CORPORATION
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103
(800) 321-1362 (General Information)

EMERGENCY TELEPHONE NUMBERS

(800) 424-9300 (CHEMTREC - U.S.A. & Canada)
(202) 483-7616 (CHEMTREC - All Other Countries)
(800) 331-3148 (FMC - U.S.A. & Canada)
(716) 735-3765 (Reverse charges - FMC)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- Tan solid in a plastic, childproof, bait container, with a bland 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.
- Slightly to highly toxic to fish and aquatic organisms. Keep out of drains and water courses.

POTENTIAL HEALTH EFFECTS: Effects from overexposure may result from oral and dermal exposure to large quantities of the bait in the station. Symptoms of overexposure include diarrhea, salivation and nasal discharge.

MEDICAL CONDITIONS AGGRAVATED: None presently known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt.%	EC No.	EC Class
Sulfluramid	4151-50-2	0.5	223-980-3	Not classified

4. FIRST AID MEASURES

EYES: Flush with water for at least 15 minutes. If irritation occurs and persists, obtain medical attention.

SKIN: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

INGESTION: Drink 1 or 2 glasses 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: The contents of the bait station has low oral and dermal toxicity. It is practically non-irritating to the eyes and non-irritating to the skin. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, CO_2 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: 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.

To clean spill area, wash with a solution of soap and water. Sweep or scrape up material, place it into a container, and label contents. Dispose of containerized wastes according to the method given in Section 13, "Disposal Considerations".

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 contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: 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.

RESPIRATORY: For dust exposure 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 cover barrier suit, such as a PVC suit. Leather items - such as shoes, belts and watchbands - that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately from household laundry).

GLOVES: Wear chemical protective gloves made of materials such as rubber, neoprene or nitrile. 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 or using tobacco. Shower at the end of the workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR:	Bland
APPEARANCE:	Tan solid, in a plastic, child-proof, bait container.
DENSITY / WEIGHT PER VOLUME:	450 g/L (28 lb/cu ft.)
MOLECULAR WEIGHT:	527.2 (sulfluramid)
SOLUBILITY IN WATER:	Insoluble

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Excessive heat and fire.
STABILITY:	Stable
POLYMERIZATION:	Will not occur
HAZARDOUS DECOMPOSITION PRODUCTS:	May produce hydrogen fluoride.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Practically non-irritating

SKIN EFFECTS: Non-irritating

DERMAL LD_{50}: > 2,000 mg/kg (rat)

ORAL LD_{50}: > 5,000 mg/kg (rat)

INHALATION LC_{50}: Sulfluramid: > 4.4 mg/l (4 h) (rat)

SENSITIZATION: The contents of the bait container produces moderate skin sensitization (allergic reaction) in laboratory animals, and in the event of damage or breakage to the bait container, it may produce similar effects in humans.

ACUTE EFFECTS FROM OVEREXPOSURE: The contents of the bait station has low oral and dermal toxicity. It is practically non-irritating to the eyes and non-irritating to the skin. Large doses administered to laboratory animals, have produced symptoms such as diarrhea and abdominal staining.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the formulation. In a battery of tests, sulfluramid was shown to be non-mutagenic. Sulfluramid was shown to

be non-teratogenic in developmental toxicity studies with laboratory animals. Preliminary studies in dogs suggest that the ingestion of high doses for prolonged periods may arrest spermatogenesis.

CARCINOGENICITY:

NTP:	Not listed
IARC:	Not listed
OSHA:	Not listed
OTHER:	(ACGIH) Not listed

12. ECOLOGICAL INFORMATION

Unless otherwise indicated, the data presented below are for the active ingredient.

ENVIRONMENTAL DATA: Sulfluramid has a Log Pow of >6.85, is considered immobile in soil, and is unlikely to enter groundwater.

ECOTOXICOLOGICAL INFORMATION: Sulfluramid is considered slightly toxic to fish and aquatic arthropods (LC_{50} values >6.6 - 10 mg/L). The toxicity to birds is considered moderate by single oral exposure, but high when the exposure is via the diet. The oral LD_{50} in bobwhite quail is 474 mg/kg, while the dietary LC_{50} is 300 ppm. The dietary LC_{50} in the mallard is 165 ppm.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Open dumping or burning of this material or its packaging is prohibited. Empty containers can be disposed of with ordinary household trash, as per label recommendations.

EMPTY CONTAINER: For larger quantities, as in the case of spills, the preferred method of disposal is to incinerate in accordance with local, state and national laws and regulations. If this method is not available, then dispose of empty container in a sanitary landfill. However, because acceptable methods of disposal may vary by location, and regulatory requirements may change, contact the appropriate regulatory authority prior to disposal.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

PACKAGING TYPE:	Non-Bulk
ADDITIONAL INFORMATION:	

defined by US Department of Transportation at 49 CFR Parts 100 through 185.

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):
There are no ingredients in this product, which are subject to Section 313 reporting requirements.

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

INTERNATIONAL LISTINGS

Australian Hazard Code: 3XE

16. OTHER INFORMATION

REVISION SUMMARY:
This MSDS replaces Revision #3, dated August 13, 1998
Changes in information are as follows:
New Format, as well as:
Section 3 (Composition / Information on Ingredients)
Section 14 (Transport Information)

Section 16 (Other Information)

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