Dow AgroSciences

GF-120 NF NATURALYTE* FRUIT FLY BAIT (GF-1111)

Emergency Phone: 800-992-5994 Dow AgroSciences LLC Indianapolis, IN 46268

Effective Date: 20-Jun-08 Product Code: 88653 MSDS: 007678

1. PRODUCT AND COMPANY IDENTIFICATION:	5. FIRE FIGHTING MEASURES:	
PRODUCT: GF-120 NF Naturalyte* Fruit Fly Bait (GF-1111)	FLASH POINT: >212 °F (100 °C)	
COMPANY IDENTIFICATION: Dow AgroSciences, LLC 9330 Zionsville Road Indianapolis, IN 46268-1189	FLAMMABLE LIMITS: LFL: Not determined UFL: Not determined EXTINGUISHING MEDIA : To extinguish residues of this	
2. HAZARDOUS IDENTIFICATIONS:	product use water fog, carbon dioxide, dry chemical or	
EMERGENCY OVERVIEW Brown liquid bait concentrate with a vinegar-like odor. Material may darken with time and temperature. May cause eye and skin irritation. Flash Point: >212 °F (100 °C). EMERGENCY PHONE NUMBER: 800-992-5994	foam. FIRE AND EXPLOSION HAZARDS: This material does not burn. FIRE-FIGHTING EQUIPMENT: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective	
3. COMPOSITION/INFORMATION ON INGREDIENTS:	fire-fighting clothing (includes fire-fighting helmet, coat,	
Spinosad: Spinosyn A CAS # 131929-60-7 0.02% Spinosyn D CAS # 131929-63-0	pants, boots, and gloves). This material does not burn. Fight fire for other material that is burning.	
Other Ingredients, Total, Including: 99.98%	6. ACCIDENTAL RELEASE MEASURES:	
Propylene glycol (1,2-Propanediol) CAS # 000057-55-6 4. FIRST AID:	ACTION TO TAKE FOR SPILLS/LEAKS: Use non-reactive absorbent to absorb small spills and collect for disposal. Report large spills to Dow AgroSciences 800-992-5994.	
EYE: Flush eyes thoroughly with water for several minutes.	7. HANDLING AND STORAGE:	
Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. SKIN: Wash skin with plenty of water. INGESTION: Call a poison control center or doctor	PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep out of reach of children. Avoid eye contact. Do not take internally. Wash thoroughly after handling and before eating, drinking, or smoking. Store product in original container. See product label for additional instructions.	
immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless	8. EXPOSURE CONTROLS/PERSONAL PROTECTION:	
 told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person. INHALATION: Move person to fresh air; if effects occur, consult a physician. NOTE TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. 	These precautions are suggested for conditions where a potential for exposure exists. Emergency conditions may require additional precautions.	
	EXPOSURE GUIDELINES : Spinosad: Dow AgroSciences Industrial Hygiene Guide is 0.3 mg/M ³ , TWA. Propylene glycol: AIHA WEEL is 50 ppm total, 10 mg/M ³ aerosol only. Proprietary Ingredient: ACGIH TLV is 10 mg/M ³ , A4; OSHA PEL is 15 mg/M ³ total, 5 mg/M ³ respirable.	



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ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS:

EYE/FACE PROTECTION: Use chemical goggles.

SKIN PROTECTION: Use gloves chemically resistant to this material.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use a NIOSH approved air-purifying respirator.

APPLICATORS AND ALL OTHER HANDLERS: Refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES:

FLASH POINT: >212°F (100°C) PHYSICAL STATE: Liquid bait concentrate ODOR: Vinegar-like DENSITY: 1.2 g/mL SOLUBILITY IN WATER: Miscible VAPOR PRESSURE: Not determined APPEARANCE: Brown (may darken with time and temperature) pH: 4.7

10. STABILITY AND REACTIVITY:

STABILITY (CONDITIONS TO AVOID): Stable.

INCOMPATIBILITY (SPECIFIC MATERIALS TO AVOID): None known.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION:

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: May cause moderate eye irritation. Corneal injury is unlikely.

SKIN: Brief contact may cause slight skin irritation with local redness. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Did not cause allergic skin reactions when tested in guinea pigs. For spinosad, the LD_{50} for skin absorption in rabbits is >5000 mg/kg.

INGESTION: Low toxicity if swallowed. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. The oral LD_{50} for rats is >5000 mg/kg.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

SYSTEMIC (OTHER TARGET ORGANS) EFFECTS: In animals, spinosad has been shown to cause vacuolation of cells in various tissues. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

CANCER INFORMATION: Spinosad did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS): Spinosad did not cause birth defects or any other fetal effects in laboratory animals, even at exposure levels having an adverse effect on the mother.

REPRODUCTIVE EFFECTS: In laboratory animal studies on spinosad, effects on reproduction were seen only at doses that produced significant toxicity to the parent animals.

MUTAGENICITY: For spinosad A, in-vitro and animal genetic toxicity studies were negative.

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12. ECOLOGICAL INFORMATION:	15. REGULATORY INFORMATION:	
ENVIRONMENTAL FATE: MOVEMENT & PARTITIONING: Based largely or completely on data for the major component(s). Bioconcentration potential is low (BCF <100 or Log Pow <3). DEGRADATION AND PERSISTENCE: Based largely or completely on data for the major component(s). Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD >40%).	NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. U.S. REGULATIONS	
ECOTOXICOLOGY: Based largely or completely on data for the major component(s). Material is practically non-toxic to fish on an acute basis $(LC_{50} \text{ orEC}_{50} \text{ is } >100 \text{ mg/L} \text{ in most sensitive species}).$ Based on data for this formulation. Acute contact LD ₅₀ in honeybee <u>(Apis mellifera)</u> is >100 µg/bee.	SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements. SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet	
13. DISPOSAL CONSIDERATIONS:	the following categories:	
DISPOSAL METHOD : Do not contaminate water, food, or feed by storage or disposal. Excess wastes resulting from the use of this product may be disposed of on site according to label directions or at an approved waste disposal facility. Follow all local, state, and federal requirements for disposal.	An immediate health hazard TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.	
14. TRANSPORT INFORMATION:		
U.S. DEPARTMENT OF TRANSPORTATION INFORMATION	STATE RIGHT-TO-KNOW : The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.	
DOT Non-Bulk NOT REGULATED	CHEMICAL NAME CAS NUMBER LIST	
DOT Bulk NOT REGULATED	1,2-PROPANEDIOL 000057-55-6 PA1	
IMDG NOT REGULATED	PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).	
ICAO/IATA NOT REGULATED	OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	



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NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health	2
Flammability	0
Reactivity	0

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND): To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

16. OTHER INFORMATION:

MSDS STATUS: Revised Sections: 2, 3, 11 & 14 Reference: DR-0364-6682 Replaces MSDS Dated: 13-Nov-03 Document Code: D03-188-004 Replaces Document Code: D03-188-003

The Information Herein Is Given In Good Faith, But No Warranty, Express or Implied, Is Made. Consult Dow AgroSciences for Further Information.