

SAFETY DATA SHEET



Emergency Phone: 1800-033-882 (24 hrs)
+61 3 9663 2130 (24 hrs)
Dow AgroSciences Australia Ltd.
Frenchs Forest NSW 2086

NATURALURE™ FRUIT FLY BAIT CONCENTRATE

Effective Date: 28 October 2011
Product Code: 1008

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Naturalure™ Fruit Fly Bait Concentrate

PURPOSE: Organic insecticide .

COMPANY IDENTIFICATION:

Dow AgroSciences Australia Ltd.
ABN 24 003 771 659
Level 5, 20 Rodborough Road,
Frenchs Forest NSW 2086

Customer Service Toll Free Number:
1800 700 096
(Mon-Fri, 8am–5pm EST)

Emergency Telephone Numbers:
Australia: 1800 033 882
Global: +61 3 9663 2130
(24 hours) (EMERGENCIES ONLY)
Transport Emergency Only Dial 000

2. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

**Not Classified as hazardous according to the criteria
of NOHSC**

Not Classified as Dangerous Goods

Potential Health Effects: May cause moderate eye
irritation. May cause slight skin irritation.

RISK PHRASES:

None applicable

SAFETY PHRASES:

S24/25: Avoid contact with skin and eyes.

S35: This material and its container must be
disposed of in a safe way.

3. COMPOSITION/INFORMATION ON INGREDIENTS:

Ingredient	CAS #	Content
Spinosad		0.02%
Spinosyn A	131929-60-7	
Spinosyn D	131929-63-0	
Propylene Glycol	000057-55-6	2.5%
Balance not contributing to hazard:		97.48%

4. FIRST AID:

**Consult the Poisons Information Centre (131126) or a
doctor in every case of suspected chemical poisoning.
Never give fluids or induce vomiting if a patient is
unconscious or convulsing regardless of cause of
injury. If breathing difficulties occur seek medical
attention immediately.**

EYE: Flush eyes thoroughly with water for several minutes.
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 the Poisons Information Centre 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 the Poisons Information Centre 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.

5. FIRE FIGHTING MEASURES:

FLASH POINT: >100°C

COMBUSTIBLE: Not combustible – will not burn.

FLAMMABLE LIMITS

LFL: Not determined

UFL: Not determined

EXTINGUISHING MEDIA: Use media suitable for
underlying fire.

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FIRE AND EXPLOSION HAZARDS: This material does not burn.

FIRE-FIGHTING EQUIPMENT: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, pants, boots, and gloves). This material does not burn. Fight fire for other material that is burning.

HAZCHEM: 2X

6. ACCIDENTAL RELEASE MEASURES:

ACTION TO TAKE FOR SPILLS/LEAKS: Do not touch or walk through spilled material. Wear waterproof gloves/footwear and overalls buttoned to neck and wrist, chemical resistant gloves. Stop leak when safe to do so. Dam the area and prevent entry into waterways, and drains. **Small spills/leaks:** Contain and absorb small spills with a proprietary absorbent suitable for chemical spills or inert materials such as sand or earth. Collect spilled product and place in sealable container for disposal. Spill residues may be cleaned using water and detergent. Contain and absorb wash water for disposal. Absorb and collect washings and place in the same sealable container for disposal. Dam the area of large spills and report them to Dow AgroSciences Emergency Services at 1800-033-882.

7. HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

HANDLING: Keep out of reach of children. Causes eye and skin irritation. Avoid contact with eyes, skin and clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

STORAGE: Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight when not in use. Do not store with food, feedstuffs, fertilizers and seeds. See product label for further handling/storage precautions relative to the end use of this product. Reduce stacking height where local conditions can affect packaging strength.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

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/m³, TWA. Propylene glycol: ASCC TWA 10 mg/m³ (particulates only), 150ppm (474mg/m³) (particulates and vapour).

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 an 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:

APPEARANCE: Brown (may darken with time and temperature)

PHYSICAL STATE: Liquid

ODOUR: Vinegar-like

pH: 4.7

DENSITY: 1.2 g/mL

SOLUBILITY IN WATER: Miscible

FLASH POINT: >100°C

VAPOUR PRESSURE: Not determined. Spinosas A (2.4 x 10⁻¹⁰); spinosad D (1.6 x 10⁻¹⁰)

10. STABILITY AND REACTIVITY:

STABILITY: Stable.

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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 LD₅₀ 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 LD₅₀ for rats is >5000 mg/kg.

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

SYSTEMIC (OTHER TARGET ORGAN) 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 foetal 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.

12. ECOLOGICAL INFORMATION:

ENVIRONMENTAL DATA:

MOVEMENT & PARTITIONING: Based largely or completely on data for the major component(s).
Bioconcentration potential is low (BCF <100 or Log Pow <3).

DEGRADATION & 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%).

ECOTOXICOLOGY: Based largely or completely on data for the major component(s).

Material is practically non-toxic to fish on an acute basis the LC₅₀ or EC₅₀ in the most sensitive species will be >100 mg/L.
Based on data for this formulation.
Acute contact LD₅₀ in honeybee (*Apis mellifera*) is >100 µg/bee once spray deposit is dry.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHOD: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

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14. TRANSPORT INFORMATION:

Not classified as Dangerous Goods for transport by road, rail, sea or air.

15. REGULATORY INFORMATION:

APVMA APPROVAL NUMBER: 58234

POISON SCHEDULE: Not Scheduled

16. OTHER INFORMATION:

Glossary

Glossary

ACGIH: American Conference of Governmental Industrial Hygienists.

BCF: Bioconcentration Factor - a measure for the characterization of the accumulation of a chemical in an organism. It is defined as the concentration of a chemical in an organism (plants, microorganisms, animals) divided by the concentration in a reference compartment (e.g. food, surrounding water).

BOD: Biochemical oxygen demand. The amount of oxygen required by aerobic microorganisms to decompose the organic matter in a sample of water, such as that polluted by sewage. It is used as a measure of the degree of water pollution. Also called biological oxygen demand.

Dow AgroSciences Industrial Hygiene Guideline: An internal company standard based on an 8 hour TWA.

EC₅₀: median effective concentration. Statistically derived concentration of a substance in an environmental medium expected to produce a certain effect in 50% of test organisms in a given population under a defined set of conditions.

Explosive Limits: The range of concentrations (% by volume in air) of a flammable gas or vapour that can result in an explosion for ignition in a confined space.

K_{oc}: the organic carbon partition coefficient (mL soil water /g organic carbon).

K_{ow}: See P_{ow}

LC₅₀: Lethal Concentration 50%. A concentration of chemical in air or water that will kill 50% of the test organisms.

LD₅₀: Lethal Dose-50%. The doses of a chemical that will kill 50% of the test animals receiving it.

NIOSH: American national Institute of Occupational Safety and Health, a federal agency which conducts research on occupational safety and health questions and recommends new standards.

NOHSC: National Occupational Health and Safety Commission of Australia now Safe Work Australia.

OSHA: American Occupational Safety and Health Administration.

PEL: Permissible Exposure Level, a maximum allowable exposure level by law.

pH: Measure of how acidic or alkaline a material is using a 1 - 14 scale. pH 1 is strongly acidic and pH 14 strongly alkaline.

Polymerisation: a chemical reaction in which small molecules (monomers) combine to form much larger molecules (polymers). A hazardous polymerisation reaction is one that occurs at a fast rate and releases large amounts of energy.

P_{ow}: The octanol-water partition coefficient is the ratio of the concentration of a chemical in octanol and in water at equilibrium and at a specified temperature. Octanol is an organic solvent that is used as a surrogate for natural organic matter. This parameter is used in many environmental studies to help determine the fate of chemicals in the environment.

Safe Work Australia: independent statutory agency with primary responsibility to improve work health and safety and workers' compensation arrangements across Australia. Previously Australian Safety and Compensation Council.

STEL: Short-Term Exposure Limit. A term used to indicate the maximum average concentration allowed for a continuous 15 minute exposure period.

TLV: Threshold Limit Value, an exposure limit set by a competent authority

TWA: Time Weighted Average. The average concentration of a chemical in air over the total exposure time - usually an 8-hour workday.

References

AS/NZS 1715-1994 Selection Use and Maintenance of Respiratory Protective Devices.

ASNZS 1716 - 1994 Respiratory protective devices.

AS/NZS 2161.10 - 2005 Occupational protective gloves - Part 10.1: Protective gloves against chemicals and micro-organisms. Australian Dangerous Goods Code

International Maritime Dangerous Goods Code.

International Air Transport Association (IATA) Dangerous Goods Regulation

NOHSC Hazardous Substances Information System.

VERSION TRACKING

Replaces version dated: 25 October 2006

Sections amended: 1, 6, 14, 16

Product code: GF-1111

FOR FURTHER PRODUCT INFORMATION CALL DOW AGROSCIENCES CUSTOMER SERVICE REPRESENTATIVES TOLL FREE 1800 700 096 DURING BUSINESS HOURS.

Dow AgroSciences (Australia) Ltd. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The

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