

MATERIAL SAFETY DATA SHEET



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

SENTRICON* AG TERMITE BAIT

Effective Date: 18 April 2008
Product Code: 38098

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Sentricon* AG Termite Bait

PURPOSE: Termite Control

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 Number:
1800 033 882
(24 hours) (EMERGENCIES ONLY)
Transport Emergency Only Dial 000

unconscious or convulsing regardless of cause of injury. If breathing difficulties occur seek medical attention immediately.

EYE: No exposure to briquettes likely. If dust in eyes open and rinse slowly and gently with water.

SKIN: No exposure to briquettes likely. If dust on skin immediately with plenty of water for 15-20 minutes. Call the Poisons Information Centre or doctor for treatment advice.

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: No exposure likely from the briquettes. If exposure to dust move person to fresh air. If person is not breathing, call 000 or an ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). Call the Poisons Information Centre or doctor for treatment advice.

NOTE TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the MSDS, and if available, the product container or label with you when calling the Poisons Information Centre or doctor, or going for treatment.

2. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Not classified as hazardous according to the criteria of NOHSC

Not classified as Dangerous Goods for land transport

RISK PHRASES:

None allocated.

SAFETY PHRASES:

None allocated.

5. FIRE FIGHTING MEASURES:

FLASH POINT: Not applicable (solid)

COMBUSTIBLE: Not combustible

FLAMMABLE LIMITS

LFL: Not determined

UFL: Not determined

EXTINGUISHING MEDIA: Foam, CO₂, or Dry Chemical.

FIRE AND EXPLOSION HAZARDS: Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Toxic irritating gases may be formed under fire conditions.

3. COMPOSITION/INFORMATION ON INGREDIENTS:

Ingredient	CAS #	Content
Hexaflumuron	086479-06-3	0.5%
Cellulose	009004-34-6	>60.0%
Balance not contributing to hazard		<10.0%

FIRE-FIGHTING EQUIPMENT: Use positive-pressure, self-contained breathing apparatus and full protective equipment.

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

*Trademark of Dow AgroSciences LLC

MATERIAL SAFETY DATA SHEET



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

SENTRICON* AG TERMITE BAIT

Effective Date: 18 April 2008
Product Code: 38098

HAZCHEM: 3X

6. ACCIDENTAL RELEASE MEASURES:

ACTION TO TAKE FOR SPILLS/LEAKS: Sweep up small spills and place in a suitable container for disposal.

7. HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

HANDLING: Keep out of reach of children. 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.

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: Contains cellulose: ASCC TWA is 10 mg/m³.

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

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

EYE/FACE PROTECTION: Use safety glasses. If there is a potential for exposure to particles, which could cause eye discomfort, wear chemical goggles.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. In dusty atmospheres, use an approved particulate respirator.

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

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: White biquettes

ODOUR: None

pH: 7.4 – 8.5 in 1% aqueous dilution

SOLUBILITY IN WATER: Not applicable

PARTITION COEFFICIENT: Hexaflumuron: Log P_{ow} = 5.68

CORROSIVENESS: Not corrosive

VAPOUR PRESSURE: Hexaflumuron: negligible @ 25 °C

VOLATILE MATERIALS: None present

10. STABILITY AND REACTIVITY:

STABILITY: Stable under normal storage conditions.

INCOMPATIBILITY: (specific materials to avoid) None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen fluoride, hydrogen chloride, nitrogen oxides and oxides of carbon.

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: Dust may cause eye irritation or corneal injury due to mechanical action.

SKIN: Dust is essentially non-irritating to skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD₅₀ for skin absorption of hexaflumuron in rats is >2000 mg/kg.

INGESTION: Low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. The oral LD₅₀ for hexaflumuron is >5000 mg/kg (rats, mice and rabbits).

INHALATION: No adverse effects are anticipated from single exposure to dust.

*Trademark of Dow AgroSciences LLC

MATERIAL SAFETY DATA SHEET



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

SENTRICON* AG TERMITE BAIT

Effective Date: 18 April 2008
Product Code: 38098

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

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

TERATOLOGY (BIRTH DEFECTS): Hexaflumuron did not cause birth defects or any other foetal effects in laboratory animals.

REPRODUCTIVE EFFECTS: In animal studies, cellulose has been shown to interfere with fertility and reproduction as a result of nutritional deficiencies associated with extremely high dietary concentrations of cellulose. Hexaflumuron in animal studies, has been shown not to interfere with reproduction.

MUTAGENICITY: Cellulose in-vitro and animal genetic toxicity studies were negative. Hexaflumuron animal genetic toxicity studies were negative and in-vitro genetic toxicity studies were negative in some cases and positive in other cases.

12. ECOLOGICAL INFORMATION:

ENVIRONMENTAL DATA:

MOVEMENT & PARTITIONING:

Bioconcentration potential for hexaflumuron is high (BCF is >3000 or Log Pow between 5 and 7).
Expected to be relatively immobile in soil (Koc is >5000).

No bioconcentration is expected for cellulose because of the relatively high molecular weight (MW is >1000).

DEGRADATION & PERSISTENCE:

Hexaflumuron is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Cellulose Degradation is expected in the soil environment.

ECOTOXICOLOGY:

Hexaflumuron:

Is very highly toxic to aquatic invertebrates on an acute basis (LC₅₀/EC₅₀ is <0.1 mg/L).

Is practically non-toxic to birds on an acute basis (LD₅₀ is >2000 mg/kg).

Is slightly toxic to birds on a dietary basis (LC₅₀ is between 1001 and 5000 ppm).

Cellulose:

Not expected to be acutely toxic to aquatic organisms.

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 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.

14. TRANSPORT INFORMATION:

DANGEROUS GOODS CLASSIFICATION

ROAD AND RAIL TRANSPORT: Not classified as dangerous goods according to the criteria of the Australian Dangerous Goods Code (ADG 7) when transported in packagings, other receptacles not exceeding 500L or IBCs.

SEA AND AIR TRANSPORT: Classified as dangerous goods for transport by sea and air in accordance with the International Maritime Dangerous Goods Code (IMDG) and the International Air Transport Association (IATA) Dangerous Goods Regulation.

UN No: 3077

Class: 9

Packing group: III

SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (HEXAFLUMURON) Marine pollutant

15. REGULATORY INFORMATION:

APVMA APPROVAL NUMBER: 57843

POISON SCHEDULE: Exempt

MATERIAL SAFETY DATA SHEET



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

SENTRICON* AG TERMITE BAIT

Effective Date: 18 April 2008
Product Code: 38098

16. OTHER INFORMATION:

Glossary

AIHA WEEL: American Industrial Hygiene Association's Workplace Environmental Exposure Level.

ASCC: Australia Safety and Compensation Commission.

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).

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).

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 dose of a chemical that will kill 50% of the test animals receiving it.

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.

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

References

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

ASNZS 1716 - 1994 Respiratory protective devices.

*Trademark of Dow AgroSciences LLC

Australian Dangerous Goods Code
International Maritime Dangerous Goods Code.
International Air Transport Association (IATA) Dangerous Goods Regulation
NOHSC Hazardous Substances Information System.

VERSION CONTROL

Replaces version dated: 6 July 2007

Sections amended: 5, 14

Product Code: GF-1407

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

This MSDS has been compiled using publicly available information, information provided by suppliers of ingredients used in the product and internal studies on the product and/or its ingredients.

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE BASED ON PUBLICLY AVAILABLE AND INTERNALLY AVAILABLE INFORMATION. EACH USER SHOULD READ THIS MSDS AND CONSIDER THE INFORMATION IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE INCLUDING IN CONJUNCTION WITH OTHER PRODUCTS. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY. THE RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

© Dow Agrosciences Australia Ltd 2007