

Sentricon AG* Termite Bait

SECTION 1: Identification of the Material and Supplier

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SECTION 2: Hazards Identification

Not Hazardous according to the criteria of the National Occupational Health & Safety Commission (NOHSC).

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

Eye: The powder may cause eye irritation or corneal injury due to mechanical action.

Skin: Non-irritating. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Ingestion: Harmful effects are not anticipated from swallowing small amounts.

Inhalation: Dust may cause irritation to upper respiratory tract (nose and throat)

Systemic (other target organ) effects: In animals hexaflumuron effects have been reported on: blood, kidney, liver and spleen. Excessive exposure may cause methemoglobinemia, thereby impairing the blood's ability to transport oxygen.

Cancer: hexaflumuron and cellulose did not cause cancer in laboratory animals.

Teratology (Birth defects): Hexaflumuron and cellulose did not cause birth defects or any other fetal effects in laboratory animals.

Reproduction: 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, did not interfere with reproduction.

SECTION 3: Composition/Information on Ingredients

Chemical	CAS No.	Proportion
Hexaflumuron (N-(((3,5-dichloro-4-(1,1,2,2-tetrafluoroethoxyphenyl)amino)carbonyl-2,6-difluorobenzamide	086479-06-3	0.5%
Cellulose	009004-34-6	99.5%

SECTION 4: First Aid Measures

Consult The National Poisons Information Centre, (Ph: 13 11 26) 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.

Swallowed: If swallowed, Call the Poisons Centre or a Doctor. Do not induce vomiting unless told to do so by the Poisons Centre or a Doctor.

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Skin: If present on the skin, Wash-off with water immediately.

Eyes: If in eyes, Hold open eyes and rinse slowly with plenty of water. Remove contact lenses, if present. Call a doctor if irritation occurs.

Inhalation: If affected. Move person to fresh air, if effects occur call a doctor.

Advice to Doctor: No specific antidote. Treatment of exposure should be directed at the control of symptoms and clinical condition of the patient.
Administer 100% oxygen to relieve headache and a general sense of weakness. Determine methemoglobin concentration of blood every 3-6 hours for first 24 hours. It should return to normal within 24 hours. The treatment to toxic methemoglobinemia may include the intravenous administration of methylene blue. If methemoglobin > 10-20% consider methylene blue 1-2 mg/kg body weight as 1% solution IV over 5 minutes followed by 15-30 cc flush (Price D, Methemoglobinemia Goldfrank toxicologic Emergencies, 5th ed., 1994). Also provide 100% oxygen. Methemoglobinemia may aggravate any pre-existing condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anaemias. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: Fire Fighting Measures

Flammable properties: Non-flammable.
Combustibility: Contains cellulose and will combust. Classified as C I combustible.
Hazardous Decomposition Products: None known.
Extinguishing Media: Foam, CO₂, or dry chemical.
Fire & Explosion Hazards: Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Toxic irritating gases may be formed under fire conditions.
Fire Fighting equipment: Use positive-pressure self-contained breathing apparatus and full protective equipment.

SECTION 6: Accidental Release Measures

Wear appropriate protective equipment (see Section 8). Clear area of all unprotected personnel. Prevent entry of chemical or used/damaged containers into sewers, drains, streams or waterways. If necessary, inform the police and the Regional Council.

Small Spill: For clean-up of a spill from a single shipping pack sweep up and place in a container suitable for disposal.
Large Spill: Stop further release or spread of spilled material. For clean up of multiple shipping packs, sweep up spilled material and place into a salvage drum for disposal. Report large spills to Dow AgroSciences.

SECTION 7: Handling and Storage

Handling

Keep out of reach of children and animals. Do not swallow. Avoid contact with eyes, skin and clothing. Wash hands thoroughly with soap and water before eating, smoking, drinking or using the toilet.

Storage

Keep out of reach of children and animals. Store in tightly closed original containers in a dry area. Do not store with food, feedstuffs, fertilisers and seeds.

SECTION 8: Exposure Control/Personal Protection

EXPOSURE STANDARDS

Cellulose: ACGIH TVL is 10 mg/m³. OSHA PEL is 15 mg/m³. Total dust, 5 mg/m³ respirable.
Hexaflumuron: TVL not established.

ENGINEERING CONTROLS

Not relevant to the end use of the product.

Personal Protection (applicators and all other handlers)

Wear latex disposable gloves during the preparation of the baittube for use, and for cleaning up spilled material.

SECTION 9: Physical and Chemical Properties

Appearance: White powder

DAS Sentricon AG Termite Bait

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Odour	None
Specific gravity:	Not determined
pH	7.4 – 8.5 in 1% aqueous dilution
Solubility in water:	Not applicable
Partition coefficient - Octanol/water (P_{ow})	Hexaflumuron: Log P _{ow} = 5.68
Corrosiveness:	Not corrosive
Vapour Pressure:	Hexaflumuron: Pa at 25 °C is negligible
Volatile materials:	None present
Flammability/combustibility:	Not flammable. C1 combustible

See also Section 5 and 10

SECTION 10: Stability and Reactivity

Chemical Stability:	Stable under normal storage conditions.
Conditions to avoid:	None known.
Materials to avoid:	None known.
Hazardous Decomposition Products:	None known.
Hazardous polymerisation:	Not known to occur.

SECTION 11: Toxicological Information

Health effects: See Section 2

Acute

Oral: LD₅₀ for rats, mice and rabbits is > 5000 mg/kg.

Skin: For hexaflumuron, the LD₅₀ for skin absorption in rats is > 2000 mg/kg.

Mutagenicity: For hexaflumuron and cellulose, animal mutagenicity studies were negative. For hexaflumuron, *in-vitro* mutagenicity studies were negative. For cellulose, *in-vitro* mutagenicity studies were negative in some cases and positive in other cases.

SECTION 12: Environmental Information

Movement and partitioning: Based largely or completely on information for hexaflumuron. Bioconcentration potential is high (BCF is >3000 or Log Pow between 5 and 7). Expected to be relatively immobile in soil (Koc is >5000). Based largely or completely on information for cellulose. No bioconcentration is expected because of the relatively high molecular weight (MW is >1000).

Degradation and persistence: Based largely or completely on information for hexaflumuron. Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Based largely or completely on information for cellulose. Degradation is expected in the soil environment.

Ecotoxicology: Based largely or completely on information for hexaflumuron. Material is very highly toxic to aquatic invertebrates on an acute basis (LC50/EC50 is <0.1 mg/L). Material is practically non-toxic to birds on an acute basis. (LD50 is >2000 mg/kg). Material is slightly toxic to birds on a dietary basis (LC50 is between 1001 and 5000 ppm). Based largely or completely on data for cellulose. Not expected to be acutely toxic.

SECTION 13: Disposal Considerations

Contaminated material must be disposed of in accordance with all local authority requirements.

Do not contaminate water, food, or feed by disposal. Excess wastes resulting from the use of this product may be disposed of at a local authority landfill.

If disposing of unwanted product, contact Dow AgroSciences or your local authority.

SECTION 14: Transport Information

This product is not classified as a Dangerous Good .

SECTION 15: Regulatory Information

Sentricon IG Termite Bait is a registered product under the Agvet Code Act 1994 (APVMA Approval number 57843).

SECTION 16: Other Information

Glossary

ACGHI American Conference of Governmental Industry Hygienists which recommends exposure limits (TLVs and BEIs).

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. inhaling or ingesting it.

LD₅₀ - Lethal Dose-50%. The dose 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.

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.

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 work day.

References

Dow AgroSciences USA MSDA 007580.

IPCS Data sheet ICSC:1266

Date of MSDS Preparation: 02 March 2004 – new.

This information in this Safety Data Sheet is given in good faith based upon current knowledge and experience. It is subject to revision as additional knowledge and experience is gained. No warranty, express or implied is made.

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

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. 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.