

Broadstrike^{*} Herbicide

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

Date of Issue: Page:

Company: Address: Website: February 2001 1 of 3

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

1800 700 096 (Mon-Fri, 8am-5pm EST)

1800 033 882 (24 hours) (EMERGENCIES ONLY)

Customer Service Toll Free Number: Emergency Telephone Number:

IDENTIFICATION

Product Name: Shipping Name: Product Code: UN No: Hazchem Code: Dangerous Goods Class: Sub Risk Class: Packaging Group: Poison Schedule: Uses:	Broadstrike Herbicide None BF-308 None allocated None allocated None allocated None allocated None allocated None allocated A water dispersible granulated formulation for the pos salvage and pre-emergence control of certain broadle crops as specified on the label	
PHYSICAL APPEARANCE & PROPERTIES Appearance: Boiling point: Volatile materials: Flashpoint: Bulk density: Solubility in water: Corrosiveness: Vapour Pressure: INGREDIENTS	Cream coloured granulated solid No specific data, expected to decompose before boilin No specific data, expected to be low at 100° C Does not burn 07 g per cubic cm Dispersible Not corrosive 37 x 10^{-7} mPa at 25°C (flumetsulam)	ng
Chemical Entity	CAS No.	Proportion
Flumetsulam	098967-40-9	800 g/kg
Other non hazardous ingredients		200 g/kg
* Tradamark of Daw AgraSaianaaa		

* Trademark of Dow AgroSciences

HEALTH HAZARD DATA

The information provided below is from studies conducted using a formulation similar to Broadstrike Herbicide.

HEALTH EFFECTS			
Acute	Swallowed:	The oral LD ₅₀ (rat and mouse) is above 5000 mg/kg (low toxicity).	
	Eye:	The granules are classified as a moderate eye irritant in rabbits. The prepared spray mix is not expected to be irritating to the eye.	
	Skin:	The acute dermal LD ₅₀ (rabbit) is above 2000 mg/kg (low toxicity).	
	Inhaled:	Exposure via this route is unlikely due to the granular formulation.	

Chronic Possible chronic health effects from exposure to Broadstrike are based on studies on the active ingredient. Rats and mice administered flumetsulam in long-term carcinogenicity studies showed no increase in tumours when compared to the untreated group. Studies in rats and rabbits have indicated that flumetsulam does not cause birth defects or interfere with reproduction. Flumetsulam does not cause genetic change. The ingredients are not listed as carcinogenic in NOHSC's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995).

PERSONAL PROTECTION AND SAFETY DIRECTIONS

Product will irritate the eyes. When handling the granules avoid contact with eyes. If product in eyes, wash it out immediately with water. Wash hands after use.

FIRST AID

General: 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, contact the Poisons Information Centre or a doctor immediately.Skin:If on skin, remove contaminated clothing and wash skin thoroughly with soap and water.Eyes:If in eyes, hold eyes open and flood with water for at least 15 minutes and see a doctor.Inhalation:If affected by dust, remove from contaminated area to fresh air.

PRECAUTIONS FOR USE

EXPOSURE STANDARDS

A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by NOHSC for any of the major ingredients in this product. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The nature of this product makes it unlikely that this level will be approached in normal use. The ADI (Acceptable Daily Intake) for Flumetsulam is set at 1mg/kg/day. The corresponding NOEL (No-observable-effect-level) is set at 100mg/kg/day. Values taken from Australian ADI List, January, 2001.

ENGINEERING CONTROLS

In industrial situations, concentrated values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe airborne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

SAFE HANDLING INFORMATION

STORAGE & TRANSPORT

Store in the closed original container in a dry, cool well-ventilated area, out of direct sunlight. Do not store near food, feedstuffs, fertilisers or seed.

SPILLS

Wear protective equipment (see PERSONAL PROTECTION). Clear area of all unprotected personnel. Prevent entry of chemical or used/damages containers into drains, streams or waterways.

Small Spill: Sweep up material and contain in a refuse vessel for disposal (see DISPOSAL).

Large Spill: Place leaking containers into salvage drums. Sweep up material for disposal and contain in a refuse vessel for disposal (see DISPOSAL). Contact Emergency Services on 000 immediately and notify Dow AgroSciences Australia Limited on 1800 033 882 (24 hours) or 1800 700 096 (Mon-Fri, 8am to 5pm, EST).

DISPOSAL

Contaminated material must be disposed of in accordance with all State and/or Local regulations.

Small quantities and containers:	Do not dispose of any undiluted chemical on site. Shred and bury empty packaging in a local authority landfill. If no landfill is available, bury the packaging below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty packaging and products should not be burnt.
Large quantities:	Contact Dow AgroSciences and seek advice.
FIRE & EXPLOSION HAZARD	
Flashpoint:	Does not burn.
Flammability limits:	Not applicable.
Special Fire Fighting procedures:	When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and self contained breathing apparatus. All skin areas should be covered.
Unusual Fire & Explosion Hazards:	Fire decomposition products from this product may form toxic and corrosive mixtures in confined spaces.
Stability:	This product is unlikely to spontaneously decompose.
Polymerisation:	Not known to occur.
Decomposition Products:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen. Oxides of sulfur. Hydrogen fluoride gas and fluorides. Water.
Materials to avoid:	Strong oxidising agents.

OTHER INFORMATION

ECOTOXICITY DATA

Flumetsulam has low toxicity to birds, fish and aquatic animals. It is nontoxic to honey bees. Flumetsulam is highly toxic to algae and some aquatic plants. Flumetsulam does not bioaccumulate in animal systems.

ENVIRONMENTAL FATE

Flumetsulam is not significantly broken down by hydrolysis or photolysis and in water degradation is due to microbial activity.

In soil, flumetsulam is broken down by microbial action. It has a half-life of two weeks to four months, depending on the soil type, pH of the soil, organic matter content, microbial activity and climatic conditions. Degradation is favoured under conditions of high pH. Soil studies have indicated that flumetsulam at recommended label rates has only limited potential to leach into soil structures and is expected to generally remain within the top 30 cm. Any trace residues entering ground water will be degraded by anaerobic or aerobic pathways.

If used according to the product label, Broadstrike Herbicide is unlikely to be harmful to the environment.

CONTACT POINT

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 FUTHER 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.