

Pledge[®] 500 WG Herbicide**SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product Name: Pledge[®] 500 WG Herbicide
Other Names: None
Recommended Use: Herbicide
Company: Sumitomo Chemical Australia Pty Ltd
A.B.N. 21 081 096 255
Address: 501 Victoria Avenue Chatswood NSW 2067
Telephone Number: (02) 9904-6499 (Mon–Fri 8am–5pm EST)
Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)
Website: www.sumitomo-chem.com.au

SECTION 2: HAZARDS IDENTIFICATION

Hazard Classification: Hazardous according to the criteria of the Australian Safety and Compensation Council (ASCC).
Risk Phrases: T:
R61 (Cat. 2) – May cause harm to the unborn child.
N:
R50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases: S22 – Do not breathe dust.
S24 – Avoid contact with skin.
S25 – Avoid contact with eyes.
S53 – Avoid exposure – Obtain special instructions before use.
SUSDP Classification (Poison Scheduling): S7 – DANGEROUS POISON
ADG Classification: Not subject to the ADG Code when transported by Road and Rail. (ADG 7, Special Provision AU01).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	CAS number	Proportion
Flumioxazin	103361-09-7	50%
Other ingredients determined as non hazardous	-	to 100%

SECTION 4: FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (Phone Australia 131126; New Zealand 0800 764 766), and follow the advice given. Show this Material Safety Data Sheet to a doctor.

General: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
Swallowed: If swallowed, do not induce vomiting, seek medical advice.
Skin contact: If on skin, remove contaminated clothing and wash skin thoroughly with soap and water. Launder contaminated clothing before re-use. Seek medical advice if irritation develops.
Eye contact: If in eyes, hold eyes open and flood with water for at least 15 minutes and seek medical advice.
Inhalation: If affected, remove from contaminated area to fresh air. If any signs or symptoms occur or persist, seek medical advice.
Note to physician: Apply basic aid and decontamination procedures. Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Flashpoint:	Not applicable.
Flammable limits:	NA
Auto-ignition temperature:	NA
Suitable Extinguishing Media:	Small fire: Use dry chemical, carbon dioxide, water spray or foam. Large fire: Use water spray, fog or foam.
Hazards from Combustion Products:	Normal combustion forms carbon dioxide, water vapour and may produce oxides of nitrogen. Combustion may produce toxic compounds of nitrogen and fluorine. Incomplete combustion can produce carbon monoxide.
Precautions for Fire Fighting and Special Protective Equipment:	Products of combustion from fires involving this product may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse.
Hazchem Code:	None.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP PROCEDURES

SPILLS

Stop the source of the spill if it is safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. Wear personal protective equipment as specified in Section 8. Do not allow material to enter sewers or bodies of water.

Small Spills: (Dry spill) Clean up spill immediately. Sweep up material carefully with brush or broom avoiding dust evolution and contain in a refuse vessel for disposal. If necessary, wash the spill area with an alkali detergent and water and absorb and contain for disposal.

Large Spills: (Dry Spill) Reduce airborne dust. Place leaking containers into salvage drums. Form a barricade around spill and in front of drains or waterways in spill vicinity, using soil or other non reactive material. Sweep up material carefully and contain in a refuse vessel for disposal. **Contact emergency services as required.**

Spills in Water: This material will dissolve in water. Stop or reduce contamination of any water. Isolate contaminated water. Remove contaminated water for treatment or disposal. Notify and consult with appropriate regulatory authorities.

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

SECTION 7: HANDLING AND STORAGE

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

Precautions for Safe Handling: DO NOT USE OR STORE near flame, sparks or hot surfaces. Use only in well ventilated area. Keep container closed. Keep out of reach of children, unauthorised persons and animals. After handling and before eating, drinking or smoking, wash hands, arms and face with soap and water. For personal protection, see Section 8.

Conditions for Safe Storage: Keep out of reach of children, unauthorised persons and animals. Store in a locked room or place away from children, animals, food, feedstuffs and fertilizers. Store in the closed, original container in a dry, cool well-ventilated area out of direct sunlight. Shake empty container into spray tank.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS

Exposure standards represent the air borne concentrations of individual chemical substances, which according to current knowledge, should neither impair the health of, nor cause undue discomfort to, nearly all workers. A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by the Australian Safety and Compensation Council (ASCC) for the active ingredient. A TWA of 10 mg/m³ is established for Kaolin clay, one of the ingredients of this product.

ENGINEERING CONTROLS

No engineering control measures are allocated to the use of this product, however always use in a well ventilated area. Do not breathe dust or spray mist.

PERSONAL PROTECTIVE EQUIPMENT

WARNING: THIS PRODUCT CONTAINS FLUMIOXAZIN WHICH CAUSES BIRTH DEFECTS IN CERTAIN LABORATORY ANIMALS. WOMEN OF CHILD BEARING AGE ARE ADVISED NOT TO MIX, LOAD OR SPRAY THIS PRODUCT. THEY SHOULD KEEP OUT OF AREAS BEING SPRAYED.

Respiratory Protection:	Use only in well ventilated areas. Respiratory protection is recommended.
Hand Protection:	Wear chemical resistant gloves.
Eye Protection:	Avoid contact with eyes. Eye contact can be avoided by wearing protective eyewear.
Skin and Body Protection:	Avoid contact with skin or clothing. Skin contact should be minimised by wearing protective clothing including gloves, hat, long sleeved shirt, long pants and chemical resistant boots.
Other Information:	Wash hands after use. Launder clothes, gloves and face shield or goggles before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (Product Specific)

Appearance:	Light brown solid granules.
Odour:	Slight
pH:	5-7 (5g/100mL suspension in distilled water)
Vapour Pressure:	NA
Vapour Density:	NA
Boiling Point:	NA
Melting Point:	NA
Solubility:	Dispersible in water.
Density:	0.495 g/cm ³
Viscosity:	NA
Flashpoint:	Not applicable.
Explosive Limits:	No explosive behaviour observed.
Ignition Temperature:	NA

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage and handling conditions (See Section 7).
Conditions to Avoid:	Avoid direct sunlight. Isolate from sources of heat, naked flames or sparks.
Incompatible Materials:	May react with strong oxidizing agents such as chlorates, nitrates, peroxides etc.
Hazardous Decomposition Products:	Emits toxic fumes under fire conditions (See also Section 5).
Hazardous Reactions:	No known hazardous reactions.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS (Formulated Product)

Toxicology

Swallowed:

NOT HARMFUL.
(LD₅₀ (rat) > 5000 mg/kg bw)

Skin:

LOW TOXICITY.
(LD₅₀ (rat) > 2000 mg/kg)
Contact with skin is not expected to be harmful.

Inhalation:

TOXIC.
(LC₅₀ rat (4 hour) > 0.969 mg/L) (maximum attainable concentration)
Inhalation of vapour is likely to be harmful.

Irritation

Skin:

SLIGHT IRRITANT.

Eye:

SLIGHT IRRITANT.

Sensitisation

Skin:

NOT A SKIN SENSITISER.

CHRONIC HEALTH EFFECTS (Active Ingredient)

Repeated exposures to flumioxazin technical in animals have produced anaemia and other blood formation changes, organ weight changes and changes in blood chemistry. Flumioxazin technical did not produce cancer in lifetime feeding studies in laboratory animals. Birth defects were produced in the offspring of female rats exposed to flumioxazin technical at doses greater than 30 mg/kg bw/day. No developmental effects were observed in rabbits. Reproductive effects were observed in rats exposed to flumioxazin technical at greater than 100ppm in the diet.

OTHER TOXICOLOGICAL INFORMATION (Active Ingredient)

Reproduction Information

May cause harm to the unborn child.

SECTION 12: ECOLOGICAL INFORMATION

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the product or used containers. DO NOT apply Pledge 500 WG Herbicide if wind is likely to cause drift onto natural and impounded lakes, waterways, streams or rivers. **A 15 meter buffer must be observed between sprayed areas and downwind natural and impounded lakes, dams, waterways, streams or rivers.**

ECOTOXICITY (Active Ingredient)

Range is slightly toxic to toxic to fish:	LC ₅₀ Bluegill sunfish (96 hour) > 21 mg/L LC ₅₀ Rainbow trout (96 hour) > 2.3 mg/L
Toxic to aquatic invertebrates:	EC ₅₀ <i>Daphnia magna</i> (48 hour) = 5.9 mg/L
Highly toxic to algae:	EC ₅₀ <i>Selenastrum capricornutum</i> (72 hour) = 0.0012 mg/L
Low toxicity to birds:	Acute Oral LD ₅₀ Bobwhite quail > 2250 mg/kg Dietary LC ₅₀ Bobwhite quail and Mallard duck (5 days) > 5620 mg/kg
Low toxicity to bees:	LC ₅₀ Honey bees (48-hour acute contact) > 105 µg ai/bee
Low toxicity to earthworms:	LC ₅₀ Earthworms (14 day) > 984 mg ai/kg soil

ENVIRONMENTAL FATE (Active Ingredient)

Flumioxazin dissipates rapidly in the environment and has a low leaching potential. Degradation half-life on soil is 11.9 -17.5 days under aerobic conditions.

SECTION 13: DISPOSAL CONSIDERATIONS

This material must be disposed of as a hazardous waste. Disposal should be in accordance with local, national or state regulations.

Contaminated Packaging: DO NOT dispose of undiluted chemicals on-site. Puncture, or shred and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.

SECTION 14: TRANSPORT INFORMATION

Road/Rail Not subject to the ADG Code when transported by Road or Rail in packagings; IBC's; or any other receptacle not exceeding 500 kg(L), (ADG Special Provision AU01).

Sea/Air Classified as dangerous in the meaning of Sea (IMDG) and Air (ICAO/IATA) transport regulations.

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Flumioxazin)
Class: 9
Sub Risk Class: Not applicable
UN Number: 3077
Hazchem Code: 2Z
Packing Group: III

SECTION 15: REGULATORY INFORMATION

Registration Status: This product is currently registered under the Australian Pesticides and Veterinary Medicines Authority (APVMA), approval number 54420.

SECTION 16: OTHER INFORMATION

Abbreviations:

NA Not Applicable
NDA No Data Available

Revision Date: 15 June 2009
Revision Number: 5

THE INFORMATION GIVEN IN THIS MSDS IS BASED ON DATA AVAILABLE AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. 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.