

# SAFETY DATA SHEET



Dow AgroSciences

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

## GALLERY™ 750 DRY FLOWABLE HERBICIDE

Effective Date: 29 June 2011  
Product Code: 20116

### 1. PRODUCT AND COMPANY IDENTIFICATION:

**PRODUCT:** Gallery™ 750 Dry Flowable Herbicide

**PURPOSE:** Selective pre-emergent herbicide.

#### 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:  
Australia: 1800 033 882  
Global: +61 3 9663 2130  
(24 hours) (EMERGENCIES ONLY)

Transport Emergency Only Dial 000

### 2. HAZARDOUS IDENTIFICATIONS:

#### EMERGENCY OVERVIEW

**Classified as hazardous according to the criteria of NOHSC**

**Classified as Dangerous Goods - see Section 14 for land transport exemption.**

#### Potential Health Effects:

Irritating to eyes and skin. Potential effects on reproduction.

#### RISK PHRASES:

R36/38: Irritating to eyes and skin.

#### SAFETY PHRASES:

S2: Keep out of reach of children.

S3/9/49: Keep only in the original container in a cool, well-ventilated place.

S20/21: When using do not eat, drink or smoke.

S24/25: Avoid contact with skin and eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS:

Ingredient	CAS #	Content
Isoxaben	082558-50-7	75 %w/w
Balance not contributing to hazard		25 %w/w

### 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:** Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

**SKIN:** Wash skin with plenty of water.

**INGESTION:** No emergency medical treatment necessary.

**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:** Not applicable - solid granule

**COMBUSTIBLE:** Not Combustible

#### FLAMMABLE LIMITS

LFL: 1.01 kg/m<sup>3</sup>

UFL: Not applicable

**AUTO-IGNITION TEMPERATURE:** 415°C to 420°C

**EXTINGUISHING MEDIA:** Use water, CO<sub>2</sub> or dry chemicals.

**FIRE AND EXPLOSION HAZARDS:** Will emit toxic vapours as it burns, including oxides of carbon and nitrogen.

**FIRE-FIGHTING EQUIPMENT:** Wear full protective clothing and use positive-pressure, self-contained breathing apparatus.

**HAZCHEM:** 2X

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### 6. ACCIDENTAL RELEASE MEASURES:

**ACTION TO TAKE FOR SPILLS/LEAKS:** Do not touch or walk through spilled material. Wear gloves, overalls and boots. Stop further spill occurring and prevent entry into waterways and drains. **Small spills:** In case of spill on floor or paved surfaces sweep up and place in drums for disposal at a licensed local authority landfill. Spill residues may be cleaned using water and detergent. Contain and absorb wash water. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the SDS, product label or Dow AgroSciences regarding disposal. **Large spills:** Report large spills to Dow AgroSciences Emergency Services at 0800 CHEMCALL (0800 243 622).

### 7. HANDLING AND STORAGE:

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

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

**STORAGE:** Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight. Do not store with food, feedstuffs, fertilisers 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 the potential for exposure exists. Emergency conditions may require additional precautions

#### EXPOSURE GUIDELINES:

Product contains clay. NOHSC TWA for kaolin 10mg/m<sup>3</sup>. Clays may contain trace quantities of silica. Silica: NOHSC TWA for respirable dust from fumed silica 2 mg/m<sup>3</sup> and quartz or tridymite 0.1mg/m<sup>3</sup>.

**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 when prolonged or frequently repeated contact could occur.

**RESPIRATORY PROTECTION:** Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required for certain operations, use an approved air-purifying respirator. 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:** Tan granule

**ODOUR:** Mild

**pH:** 8.5 to 10.0 (aqueous 50/50)

**RELATIVE DENSITY:** 1.1 g/mL

**VAPOR PRESSURE:** 55 x 10<sup>-4</sup> mPa @ 25°C (isoxaben)

**VAPOR DENSITY:** Not applicable

**SOLUBILITY IN WATER:** Disperses in water

### 10. STABILITY AND REACTIVITY:

**STABILITY:** Do not store near heat or flame. Do not store in direct sunlight. Do not store at temperatures above 50°C.

**INCOMPATIBILITY:** (specific materials to avoid) None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Will emit toxic vapours as it burns including oxides of carbon and nitrogen.

**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, which may be slow to heal. May cause slight temporary corneal injury.

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**SKIN:** Prolonged or repeated exposure may cause slight skin irritation. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD<sub>50</sub> for skin absorption in rabbits is >5000 mg/kg.

**INGESTION:** Very low toxicity if swallowed. The oral LD<sub>50</sub> for rats is >5000 mg/kg. Harmful effects not anticipated from swallowing small amounts.

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

**SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:** Contains component(s), which, in animals, have been shown to cause liver and kidney effects. May contain trace amounts of silica. Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs. Some evidence suggests that kidney effects may also result from excessive exposure.

**CANCER INFORMATION:** An increase in non-malignant liver tumors was observed with isoxaben in one of two species tested. May contain trace amounts of silica which is suspected to be a carcinogen.

**TERATOLOGY (BIRTH DEFECTS):** Isoxaben caused birth defects in laboratory animals only at doses toxic to the mother.

**REPRODUCTIVE EFFECTS:** Isoxaben has been shown to interfere with reproduction in animal studies.

**MUTAGENICITY:** In-vitro and animal genetic toxicity studies were negative.

### 12. ECOLOGICAL INFORMATION:

#### ENVIRONMENTAL DATA:

#### MOVEMENT & PARTITIONING:

Based largely or completely on information for isoxaben.

Bioconcentration potential is low (BCF for fish = 70.5, Log Pow = 2.64).

Potential for mobility is slight (K<sub>oc</sub> between 2000 & 5000) – isoxaben K<sub>oc</sub> 2927 estimated. Henry's law constant (H): 1.27E-09 atm\*m<sup>3</sup>/mole; 25

**DEGRADATION & PERSISTENCE:** Based largely or completely on information for isoxaben.

Expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready

biodegradability. Biodegradation rate may increase in soil and/or water with acclimation.

Water half-life: 3.9 – 65.3h; pH7

The photolysis half-life in water is 6 days.

The photolysis half-life in soil is 248 days.

Under aerobic soil conditions the half-life is 4.3-10.6 months.

**ECOTOXICOLOGY:** Based largely or completely on information for isoxaben.

Isoxaben is practically non-toxic to birds and aquatic organisms (except to duckweed – EC<sub>50</sub> fronds & biomass ~ 0.01 mg/L) up to its limit of water solubility (~1 mg/L), and harmless to beneficial terrestrial invertebrates.

### 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 regulations. 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.

### 14. TRANSPORT INFORMATION:

#### DANGEROUS GOODS CLASSIFICATION

##### ROAD AND RAIL TRANSPORT:

Not dangerous goods under the ADG code when being transported in IBCs or other receptacles < 500 L (kg), (Special Provision AU01).

**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. (ISOXABEN). Marine pollutant

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### 15. REGULATORY INFORMATION:

APVMA APPROVAL NUMBER: 47333  
POISON SCHEDULE: 5

### 16. OTHER INFORMATION:

#### 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.

**EC<sub>50</sub>:** 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<sub>oc</sub>:** the organic carbon partition coefficient (mL soil water /g organic carbon).

**K<sub>ow</sub>:** See P<sub>ow</sub>

**LC<sub>50</sub>:** Lethal Concentration 50%. A concentration of chemical in air or water that will kill 50% of the test organisms.

**LD<sub>50</sub>:** 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<sub>ow</sub>:** 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:** 14 June 2006

**Sections amended:** 2, 12, 14, 15, 16

**Product code:** FN 3133

#### 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 information herein is provided in good faith and believed to be accurate as of the effective date shown above.*

*However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped.*

*Since conditions for use of the product are not under the*

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*control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.*

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