

Material Safety Data Sheet



Gallery* 75 DF Herbicide

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In case of emergency Call CANUTEC at 613 996 6666

1. Product Identification:**Product name:** Gallery* 75 DF Herbicide**Product use:** A selective pre-emergent herbicide for certain broadleaved weeds in conifer bare-root and container nursery stock for certain trees grown for silviculture purposes.**Product code number:** 20116**GMID numbers:** 81614**Effective date:** September 17, 2008**Supplier:**Dow AgroSciences Canada Inc.
Suite 2100, 450 - 1st Street SW,
Calgary, Alberta,
Canada, T2P 5H1
www.dowagro.ca**This product is regulated under authority of the Pest Control Products Act****2. Composition:**

Component	CAS Number	% (w/w)
Isoxaben	082558-50-7	75.0
Other ingredients:		25.0
Including:		
Kaolinite	001332-58-7	
¹ Crystalline silica	015468-32-3	<1.0 ²

¹Contained in Kaolinite
²As a percentage of entire formulation

3. Hazard Identification:**Emergency Overview:**

This product is a light tan dispersible granule with a mild aromatic odor. Contact may cause moderate eye irritation with corneal injury.

Potential Health Effects:**Eyes:** This product may cause moderate eye irritation which may be slow to heal, and slight transient (temporary) corneal injury.**Skin contact:** Prolonged or repeated exposure may cause slight skin irritation.**Skin absorption:** Prolonged skin contact is unlikely to result in this product being absorbed in harmful amounts.**Ingestion:** Harmful effects not anticipated from swallowing small amounts.**Inhalation:** No adverse effects are anticipated from a single exposure to dust.**4. First Aid Measures:****Eyes:** Immediately flush eyes with water and remove contact lenses, if present, after the first five minutes. Then continue flushing eyes for at least 15 minutes. Obtain specialist medical attention without delay.**Skin:** Wash skin with plenty of water.**Ingestion:** No emergency medical treatment is necessary.**Inhalation:** Remove individual to fresh air. If breathing difficulty occurs, get medical attention.**Note to physician:**

There is 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**Flammable limits:** LFL: 4.43 g/m³

UFL: Not applicable

Auto-ignition temperature: 415° to 420°C**Extinguishing media:** Water, CO₂ or dry chemical**Sensitivity to mechanical impact/static discharge:** Not available**Unusual fire and explosion hazards:** This product will emit toxic vapors as it burns. Contain fire-fighting water for future disposal.**Fire-fighting equipment:** Wear positive-pressure self-contained breathing apparatus and full turnout gear.**6. Accidental Release Measures:**

Sweep up small spills and store in a suitable container. Do not allow spilled material to contaminate water supplies. For large spills out of doors, cover the spill with a waterproof

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material to prevent moisture from dispersing isoxaben. For large spills, dike and barricade the affected area, and contact CANUTEC at 613 996 6666 and local authorities.

7. Handling and Storage:

Handling: Keep out of reach of children. This product causes eye irritation. It may be harmful if inhaled. Avoid ingestion, breathing dust or spray mist, and contact with eyes, skin, or clothing. Remove and wash contaminated clothing before reuse. Contaminated clothing should be washed separately from domestic laundry and line-dried. Once used for contaminated clothing, the washing machine should be operated through a complete cycle with hot water and heavy-duty laundry detergent only, prior to use for domestic laundry. Users should wash hands before eating, drinking, chewing gum, using tobacco or the toilet.

Storage: Store in original container only. Keep container tightly closed when not in use. Keep away from heat, open flame or direct sunlight. Do not store at temperatures greater than 49°C. Do not ship or store this product with foodstuffs, feed, seed, drugs or clothing.

8. Exposure Controls, Personal Protection and Exposure Limits:**Exposure limits:**

Isoxaben: Not available

Kaolinite: ACGIH TLV is 2 mg/m³ respirable; ACGIH rating is A4. OSHA PEL is 10 mg/m³ total dust, 5 mg/m³ respirable.

Crystalline silica (contained in kaolin): ACGIH TLV is 0.1 mg/m³ (respirable) for Tripoli and fused silica; 0.05 mg/m³ (respirable) for cristobalite, tridymite, and quartz. Quartz has an A2 designation. OSHA PEL is (30 mg/m³)/(%SiO₂+2) total dust, (250 mppcf)/(%SiO₂+5) or (10 mg/m³)/(%SiO₂+2) respirable for quartz, tripoli, and fused silica; the value for cristobalite and tridymite is ½ the value calculated for the respirable dust formula for quartz.

Engineering controls: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Breathing: 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 dust respirator.

Protective clothing: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur.

Eyes: Use chemical workers' goggles.

Other protection: None specified

9. Physical and Chemical Properties:

Boiling point: Not applicable.

Vapor pressure: Not applicable

Vapor density: Not available

pH: (aqueous 50/50) 8.5 to 10

Appearance: Light tan water-dispersible granule

Odor: Mild aromatic odor

Coefficient of water/oil distribution: Not available

Specific gravity: Not applicable

Evaporation rate: Not applicable

Solubility in water: Disperses in water

Freezing point: Not applicable

Odor threshold: Not available

Melting point: Not applicable

10. Stability and Reactivity:

Stability: Do not store near heat or open flame. Store out of direct sunlight. Do not store at temperatures greater than 49°C.

Incompatibility: None known.

Hazardous decomposition products: This product will emit toxic vapors as it burns.

Hazardous polymerization: Does not occur

11. Toxicological Information:

Skin absorption: Acute dermal LD50 (rabbit) is >5000 mg/kg.

Ingestion: Acute oral LD50 (rat) is >5000 mg/kg.

Inhalation: Not available.

Sensitization: Not available

Chronic effects: This product contains components that in test animals, have been shown to cause liver and kidney effects. 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.

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Cancer: The kaolinite component of this formulation contains crystalline silica. Crystalline silica is listed as a carcinogen by IARC and as a potential carcinogen by NTP. An increase in non-malignant liver tumors was seen with isoxaben in one of two species tested.

Birth defects: Isoxaben caused birth defects in laboratory animals, but only at doses that were toxic to the mother.

Reproductive effects: Isoxaben has been shown to interfere with reproduction in animal studies.

Mutagenicity: Results of *in-vitro* mutagenicity studies and mutagenicity studies in animals were negative.

12. Ecological Information:

Isoxaben is not considered a hazard to bees. Isoxaben is not expected to be acutely toxic to aquatic organisms, and is practically non-toxic to birds on an acute basis. Bio-concentration potential for isoxaben is low.

Degradation and Metabolism:

In soil: Half-life in soil of isoxaben is three to four months. Lysometer studies confirm a lack of mobility of isoxaben in soil.

In plants: Isoxaben is extensively metabolized, primarily through hydroxylation of the alkyl side-chain. For details of absorption, translocation and metabolism in oilseed rape and wheat, see F. Cabanne, *Weed Res.* 1987, **27**, 135.

In animals: In rat, following oral administration, 90% of the ingested isoxaben is excreted in the feces within 48 hours. About 10% of the absorbed isoxaben undergoes conversion to 15 to 20 metabolites, which are excreted in the urine. There is no accumulation of either the parent material or metabolites in cell tissue.

13. Disposal Considerations:

Unused unwanted product: Contact Dow AgroSciences or your provincial regulatory agency for disposal information.

Container disposal: Refer to the product label for instructions regarding cleaning and disposal of empty pesticide containers. If these instructions are missing or not understood, contact Dow AgroSciences at 800 667 3852 or your provincial regulatory agency for direction.

14. Transport Information:

This product is classified as “**Not Regulated**” under regulations of the Transportation of Dangerous Goods Act.

15. Regulatory Information:

Pest Control Products Act registration number: 24110

For information phone: 800 667 3852

Master reference: 3994

MSDS status: Revised sections:
N/A

Replaces MSDS dated: August 20, 2005

16. Other Information:

National Fire Code classification: Not regulated

NFPA ratings: Health: 2; Flammability: 0; Reactivity: 0.

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