

Material Safety Data Sheet



Milestone* Herbicide

In case of emergency call CANUTEC at 613 996 6666

Product name: Milestone* Herbicide

Product use: For use in wheat, barley, rye, corn, strawberries, raspberries, asparagus, cranberries, established pastures, rangeland, turf, stubble land, roadsides, uncropped land and control of woody growth.

Product code number: Pending

GMID numbers: 264158

MSDS number: DASCI-236

Effective date: July 5, 2005

Supplier:

Dow AgroSciences Canada Inc.
Suite 2100, 450 – 1st Street SW,
Calgary, Alberta,
Canada, T2P 5H1
www.dowagro.ca

Date printed: February 25, 2006

This product is regulated under authority of the Pest Control Products Act

2. Composition:

| Component | CAS number | %(w/w) |
|-----------------------|---------------|--------|
| Aminopyralid (DE-750) | 150114-71-9 | 40.6 |
| Other ingredients | Not available | 59.4 |
| Including: | | |
| Triisopropanolamine | 000122-20-3 | |

3. Hazard Identification:

Emergency Overview:

This product is a brown liquid with a mild odor. This product may cause temporary eye irritation and skin irritation.

Potential Health Effects:

Eyes: This product may cause slight temporary eye irritation. Corneal injury is unlikely.

Skin contact: Brief contact may cause slight skin irritation with local redness.

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

Ingestion: Harmful effects not anticipated from swallowing small amounts of this product.

Inhalation: Prolonged exposure is not expected to cause adverse effects.

4. First Aid Measures:

Eyes: Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial one to two minutes and continue flushing for several additional minutes. Get specialist medical attention if effects occur.

Skin: Wash affected skin with plenty of water.

Ingestion: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person. Get medical attention if effects occur.

Inhalation: Move person to fresh air. If effects occur, get medical attention

Note to physician: If a burn is present, treat as any thermal burn, after decontamination. 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:

Auto-ignition temperature: Not available

Flash point: Not applicable (This is a water-based material.)

Flammability limits: Not available

Extinguishing media: Use foam, CO₂ or dry chemical.

Sensitivity to mechanical impact/static discharge: Not available

Unusual fire and explosion hazards: Foam fire extinguishing systems are preferred because uncontrolled water can spread possible contamination. Toxic irritating gases may be formed under fire conditions.

Fire-fighting equipment: Wear positive-pressure self-contained breathing apparatus and full turnout gear. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. Accidental Release Measures:

Soak up spills with absorbent material. Store collected absorbed material in a sealed

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container until proper disposal can be arranged. Wash exposed body areas thoroughly after handling. 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. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors and spray mist. Handle Milestone Herbicide in a ventilated area. Wash thoroughly with soap and water after handling and before eating, chewing gum, using tobacco, using the toilet or smoking.

Storage: Keep away from food, feedstuffs, and water supplies. Store in original container only with lid tightly closed.

8. Exposure Controls, Personal Protection and Exposure Limits:

Exposure limits: Aminopyralid: Not available
Triisopropanolamine: Dow AgroSciences
Industrial Hygiene Guide is 10 mg/m³

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 guideline. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use a NIOSH approved air-purifying respirator.

Protective clothing: For brief contact during manufacture, warehousing and transport, wear clean body-covering clothing. During operations where exposure to the concentrated product may occur, use protective clothing impervious to this product. Selection of specific items such as face-shield, respirator, boots, gloves, apron or full body suit will depend on the operation being carried out. Applicators and other field handlers, including persons repairing or cleaning application equipment, must wear coveralls over clean body-covering clothing, impervious gloves and boots. As an additional precaution, persons making and/or transferring field dilutions of this product may wear an impervious apron.

Eyes: Use safety glasses.

Other protection: None specified.

9. Physical and Chemical Properties:

Boiling point: Not available

Vapor pressure: Not available

Vapor density: Not available

pH: 7.33 at 19.8°C for a 1% solution

Appearance: Brown liquid

Odor: Mild

Coefficient of water/oil distribution: Not available

Specific gravity: 1.14 g/mL at 20°C

Evaporation rate: Not available

Solubility in water: Not available

Freezing point: <-10°C

Odor threshold: Not available

10. Stability and Reactivity:

Stability: This product is stable under recommended storage conditions.

Incompatibility: Not determined

Hazardous decomposition products: Not determined

Hazardous polymerization: Not known to occur.

11. Toxicological Information:

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

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

Inhalation: The maximum practically-attainable concentration of this product in the tests (5.79 mg/L for four hours) produced no ill effects in test animals.

Sensitization: This product did not cause allergic skin reactions when tested in guinea pigs.

Chronic effects: For aminopyralid, in animals, effects have been reported on the gastrointestinal tract.

Cancer: Aminopyralid did not cause cancer in laboratory animals.

Teratology defects: Aminopyralid did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

Reproductive effects: Aminopyralid, in animal studies, did not interfere with reproduction.

Mutagenicity: *In-vitro* genetic toxicity studies with aminopyralid were predominantly negative. Animal genetic toxicity studies with aminopyralid were negative.

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12. Ecological Information:

Aminopyralid is not toxic to bees and non-toxic to aquatic organisms on an acute basis. Aminopyralid is practically non-toxic to birds on an acute or dietary basis. Based largely or completely on information for aminopyralid, bio-concentration potential for Milestone Herbicide is low. For more complete eco-toxicological information contact Dow AgroSciences at 800 667 3852.

Degradation and Metabolism:

Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Biodegradation reached in Manometric Respirometry Test (OECD Test No. 301 F) after 28 days is 0%. The rate constant for the vapor phase reaction with photochemically produced hydroxyl radicals at 25°C is estimated to be $1.6646 \text{ E}^{-12} \text{ cm}^3/\text{molecule-sec}$ at 25°C. In the atmospheric environment, material is estimated to have a tropospheric half-life of 6.426 days

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 "**Not Regulated**" under regulations of the Transportation of Dangerous Goods Act.

15. Regulatory Information:

Pest Control Products Act registration number: 28137

For information phone: 800 667 3852

Master Number: GF-871 MSDS 3/9/04

MSDS status: Revised Sections:

1. Product Identification
12. Ecological Information
15. Regulatory Information

Replaces MSDS dated: March 11, 2004

16. Other Information:

National Fire Code classification: Not available

NFPA ratings: Not available

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