

# FUTURE FARM & FOREST SERVICES & SUPPLIES

Reg. 1998/14639/07  
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## MATERIAL SAFETY DATA SHEET

### SECTION 1 - CHEMICAL IDENTIFICATION

<b>Trade Name</b>	<b>Eco-Imazapyr 100 SL</b>
<b>Chemical Name of Active Ingredient:</b>	Imazapyr
<b>CAS RN:</b>	81334-34-1
<b>Chemical Class:</b>	Imidazolinone
<b>Use:</b>	Agricultural herbicide
<b>Formulation:</b>	Soluble concentrate

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<b>Ingredient</b>	<b>Proportion</b>
Imazapyr (present as Imazapyr-isopropylammonium)	100 g/liter
Other inert ingredients (non hazardous)	up to 1 liter

### SECTION 3 - HAZARD INFORMATION

#### **ACUTE EFFECTS OF EXPOSURE:**

No specific symptoms of acute overexposure are known to occur in humans. Animal studies have shown that this material is almost non-toxic by the oral and dermal routes. It is minimally irritating to the conjunctiva of the eye but the irritation is reversible within 72 hours. It may cause slight dermal irritating but not a dermal sensitizer.

#### **CHRONIC EFFECTS OF EXPOSURE:**

No specific symptoms of chronic overexposure are known to occur in humans.

#### **CARCINOGENICTY:**

This product is not listed by NTP, IARC or regulated as carcinogen by OSHA

## **MEDICAL CONDITINS AGGRAVATED BY EXPOSURE:**

No specific medical conditions as known which may be aggravated by exposure to this product.

## **SECTION 4 - FIRST AID MEASURES**

### **FIRST AID FOR EYES:**

Hold eyelids open and flush with copious amounts of water for 15 minutes. Call a physician if irritation persists or develops after flushing.

### **FIRST AID FOR SKIN:**

Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation persists.

### **FIRST AID FOR INHALATION:**

First, remove victim to fresh air or uncontaminated area. If not breathing, give artificial respiration, preferably by mouth. Get medical attention as soon as possible.

### **FIRST AID FOR INGESTION:**

If ingestion is suspected, call a physician or poison control centre. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control centre or doctor. Do not give anything to an unconscious person.

**NOTE TO PHYSICIAN:** No specific antidotes. Treat symptomatically.

## **SECTION 5 - FIRE FIGHTING MEASURES**

**FLASH POINT:** Not available

### **FLAMMABLE LIMITS:**

**UPPER EXPLOSIVE LIMIT (UEL) (%)** Not Applicable

**LOWER EXPLOSIVE LIMIT (LEL) (%)** Not Applicable

**EXTINGUISHING MEDIA:** Water; Carbon; Dioxide. Dry Chemical, Foam.

### **SPECIAL FIRE FIGHTING PROCEDURES:**

Keep out of smoke, cool exposed containers with water spray. Fight fire from upwind position. Use self-contained breathing equipment. Contain run-off by diking to prevent entry into sewers or waterways. Equipment or materials involved in pesticide fires may become contaminated.

## **SECTION 6 - ACCIDENTAL SPIL/RELEASE MEASURES**

### **SPILL OR LEAK PROCEDURES:**

Isolate area and keep unauthorized people away. Do not walk through spilled material.

Avoid breathing vapors and skin contact. Remove sources of ignition if combustible or flammable vapors may be present and ventilate area. Wear proper protective equipment.

Dike contaminated area with absorbent granules, soil, sand, etc. If large spill, material should be recovered. Small spills can be absorbed with absorbent granules, spill control pads, or any absorbent material. Carefully sweep up absorbed spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with soap and water.

Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal.

Contaminated soil may have to be removed and disposed. Do not allow material to enter streams, sewers, or other waterways or contact vegetation.

## **SECTION 7 - HANDLING AND STORAGE**

### **Precautions to be taken in handling and storage:**

Store in area designated specifically for pesticide. Do not store near any material intended for use or consumption by humans or animals. Store in a cool, dry area. Do not store in direct sunlight. Protect from freezing temperatures. Do not contaminate water, food, or feed by storage, disposal, or by cleaning of equipment. Do not reuse empty container. Open dumping is prohibited.

## **SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION**

### **EYE PROTECTION REQUIREMENTS:**

Splash-proof goggles should be used to prevent liquid splashes from getting into the eyes.

### **SKIN PROTECTION REQUIREMENTS:**

Wear long sleeves and trousers to prevent skin contact.

### **HAND PROTECTION REQUIREMENTS:**

The use of chemical-resistant gloves to prevent skin contact is recommended as good practice.

### **RESPIRATOR REQUIREMENTS:**

Under normal handling conditions, no respiratory protection is needed; however, when potential exposure to this product is excessive, wear a respirator approved for dusts and mist or for pesticides.

### **VENTILATION REQUIREMENTS:**

Control exposure levels through the use of general and local exhaust ventilation where needed.

**ADDITIONAL PROTECTIVE MEASURES:**

Clean water should be available for washing in case of eye or skin contamination.  
Educate and train employees in safe use of the product. Follow all label instructions.  
Launder clothing after use. Wash thoroughly after handling.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>PHYSICAL FROM:</b>	Liquid
<b>COLOR:</b>	Brown
<b>ODOR:</b>	Slight characteristic
<b>BOILING POINT:</b>	Not available
<b>MELTING POINT:</b>	Not available
<b>SOLUBILITY IN WATER:</b>	100%
<b>SPECIFIC GRAVITY:</b>	1.09 at 20°C
<b>Ph</b>	5.0-8.0
<b>VAPOR PRESSURE:</b>	Negligible

**SECTION 10 - STABILITY AND REACTIVITY**

<b>STABILITY:</b>	This is a stable material.
<b>HAZARDOUS POLYMERIZATION:</b>	Will not occur.
<b>INCOMPATIBILITIES:</b>	None known.
<b>INSTABILITY CONDITIONS:</b>	Strong exothermic reaction above 100°C
<b>DECOMPOSITION PRODUCTS:</b>	None known

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Acute Data for technical

Oral LD50 – rat:	>5000mg/kg
Dermal LD50 - rabbit:	>2000mg/kg
Skin irritation - rabbit:	Slightly irritating
Eye Irritation - rabbit:	Slightly irritating
Inhalation LC50 (4h) – rat:	>2.0mg/1 air
Sensitization:	Not a skin sensitizer

**Other:** Not mutagenic or teratogenic

## SECTION 12 - ECOLOGICAL INFORMATION

### Imazapyr Technical:

**Birds:** Acute oral LD50 for bobwhite quail and mallard ducks > 2150 mg/kg. Dietary LC50 (8d) for bobwhite quail and mallard ducks > 5000 mg/kg.

**Fish:** LC50 (96h) for rainbow trout, bluegill sunfish, and channel cat fish > 100 mg/l.

**Bees:** Dermal Ld50 for honeybees > 100 ug/bee.

## SECTION 13 - DISPOSAL INFORMATION

### WASTE DISPOSAL METHOD:

Follow container label instructions for disposal of wastes generated during use in compliance with the product label. In other situations, bury in an approved landfill or burn in an incinerator approved for pesticide destruction. Do not re-use container.

## SECTION 14 - TRANSPORTATION INFORMATION

**SHIPPING NAME:** Eco-Imazapyr 100 SL

**FREIGHT CLASS PACKAGE:** Herbicides

**DOT (DOMESTIC SURFACE):**

PROPER SHIPPING NAME: Not hazardous or regulated  
HAZARD CLASS OR DIVISION: Non-Regulated

**IMO / IMDG CODE (OCEAN):**

PROPER SHIPPING NAME: Not hazardous or regulated  
HAZARD CLASS DIVISION NUMBER: Non-Regulated

**ICAO / IATA (AIR)**

PROPER SHIPPING NAME: Not hazardous or regulated  
HAZARD CLASS DIVISION NUMBER: Non-Regulated

**SECTION 15. REGULATORY INFORMATION**

Not applicable.

**SECTION 16 OTHER INFORMATION**

Revise Date: October , 2006

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.