



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Sethoxydim E-Pro Herbicide
Active Ingredient: Sethoxydim
Chemical Formula: $C_{17}H_{29}O_3NS$

COMPANY IDENTIFICATION:

Etigra
501 Cascade Pointe Lane, Suite 103
Cary, NC 27513
UNITED STATES

2. COMPOSITION/INFORMATION ON INGREDIENTS

Sethoxydim	CAS No. 74051-80-2	13.0%
Naphthalene	CAS No. 91-20-3	1.3%

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Inhalation of the mists/vapors results in irritation to the nose, throat and lungs.

EFFECTS FROM OVEREXPOSURE: Causes moderate eye injury. Harmful if swallowed or absorbed through the skin. Inhalation of the mists/vapors results in irritation of the nose, throat and lungs. Prolonged or repeated skin contact may cause defatting and dermatitis.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Acute overexposure to naphtha solvent vapors may cause central nervous system effects, including headache, dizziness, drowsiness, confusion and/or excitement. Ingestion causes cramps, nausea, vomiting, blurred vision, and/or CNS disorder.

Chronic overexposure may result in liver/kidney disorders. Hemolysis, anemia, fever, hemoglobulinuria and jaundice may also occur. Those with prior blood diseases may be more severely affected.

4. FIRST AID

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. 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. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: This product contains aromatic hydrocarbons. In cases of severe acute poisoning, the decision of whether to induce vomiting or not should be made by the attending physician. If lavage is performed, endotracheal and/or esophageal control is suggested. Danger from lung aspiration must be evaluated against toxicity when considering emptying the stomach.

5. FIRE-FIGHTING MEASURES

Flash point (Method): 188°F TCC

Flammable Limits: Lower: 1.3 @ 70°C Upper: 5.3 @ 103°C

Fire and Explosion Hazard: None

Means of Extinguishing: Use foam, CO₂, water fog or dry chemical extinguishing media.

Manufactured for:
Etigra
501 Cascade Pointe Lane
Suite 103
Cary, NC 27513
www.etigra.com

REV 0107

Etigra

Emergency Phone: Chemtrec 800-424-9300

Effective Date: December 13, 2004

EPA Reg. No. 79676-4

ETIGRA™

Fire Fighting Instructions: Firefighters should wear self-contained breathing apparatus and turnout gear.

NFPA 704 Hazard Codes: Health – 2, Flammable – 2, Instability – 2, Other – N/A

6. ACCIDENTAL RELEASE MEASURES

Recover material for use according to product label directions whenever possible. Wear gloves, goggles and boots when cleaning up liquid spill. Cover contaminated area with absorbent material until dry. Spills that cannot be recovered should be contained, solidified and placed in suitable containers for disposal in a licensed facility.

7. HANDLING AND STORAGE

Wash hands before eating, drinking, chewing gum, using tobacco or using toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Clean water should be available for washing in case of eye or skin contamination.

Do not store below 32°F or above 100°F. Store in a dry place away from heat or open flame. Avoid contamination of feed or foodstuffs. Keep out of reach of children and animals. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust at all process locations where vapor or mist may be emitted. Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal Protective Equipment:

Respiratory Protection: Wear supplied air respirators if large quantities of vapor are generated or prolonged exposure is possible.

Eyes and Face: For splash, mist or spray exposure, wear chemical protective goggles or a face shield.

Protective Clothing: Wear long-sleeved shirt and long pants; shoes plus socks.

Gloves: Wear chemical resistant gloves such as barrier laminate, nitrile rubber $\geq$ 14 mils, neoprene rubber $\geq$ 14 mils, or viton $\geq$ 14 mils. Inspect gloves regularly for leaks. Thoroughly wash the outside of gloves with soap and water prior to removing.

Additional information on personal protective clothing for applicators of this product may be found on the product label.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid

Odor: Mild aromatic odor

pH: 3.21-3.5 (5% in water)

Specific Gravity: 0.906 g/mL (7.56 lbs./gal.)

Vapor Pressure: 2 mmHg @ 20°C

Solubility in Water: Emulsifies

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat, air, moisture

CHEMICAL STABILITY: Stable

CHEMICAL INCOMPATIBILITY: Oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Heat and fire may result in thermal decomposition and the release of sulfur dioxide and nitrous oxides during combustion.

HAZARDOUS POLYMERIZATION: Will not occur

CORROSIVE TO METAL: No

OXIDIZER: No

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY

Oral LD₅₀ (rat): >2200 mg/kg

ACUTE DERMAL TOXICITY

Dermal LD₅₀ (rat): >2000 mg/kg

ACUTE INHALATION TOXICITY

Inhalation LC₅₀ (rat): >7.6 mg/L (4 hrs.)

EYE IRRITATION

Rabbit: Slightly irritating

SKIN IRRITATION

Rabbit: Slightly irritating

DERMAL SENSITIZATION

Guinea pig: Non-sensitizing

CARCINOGENICITY:

ACGIH: Not listed

IARC: Group 2B (naphthalene)

NTP: Listed (naphthalene)

OSHA: Not listed

CA Prop 65: Listed (naphthalene)

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Environmental toxicity data is not available for formulated product.

ECOTOXICOLOGICAL INFORMATION:

The following ecotoxicity values were obtained for the active ingredient:

FISH TOXICITY

96 hour LC₅₀, Bluegill – 265 mg/L

96 hour LC₅₀, Trout – 170 mg/L

48 hour EC₅₀, Daphnia – 78.1 mg/L

AVIAN TOXICITY

Mallard Acute LD₅₀ – > 2510 mg/kg

Mallard Dietary LC₅₀ – > 5620 ppm

Bobwhite Dietary LC₅₀ – > 5620 ppm

BEE TOXICITY

The active ingredient in this product, sethoxydim, is non-toxic to honeybees when applied topically up to 10 µg/bee or when sprayed on at a concentration simulating exposure to the maximum recommended use rate of 2000 ppm.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

When transported in bulk packaging greater than 119 gallons:

DOT PROPER SHIPPING NAME: Compounds, weed killing, liquid, n.o.s. (contains naphthalene)

DOT HAZARD CLASS OR DIVISION: 3

DOT UN/NA NUMBER: NA1993

DOT PACKING GROUP: III

REPORTABLE QUANTITY: 100 lbs.

MARINE POLLUTANT: Not listed

DOT EMERGENCY RESPONSE GUIDE: 128

When transported in non-bulk packaging less than or equal to 119 gallons:

Not regulated by DOT.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

FIFRA –

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

OSHA HAZARD COMMUNICATION STANDARD STATUS:
Not Regulated

SARA Title III – Section 302 Extremely Hazardous Substances
Not listed

SARA Title III – Section 311 Hazardous Categories
Immediate, Delayed, Fire

SARA Title III – Section 312 Threshold Planning Quantity
10,000 lbs.

SARA Title III – Section 313 Reportable Ingredients
Listed (Sethoxydim, Naphthalene)

CERCLA

Chemical Name	Wt.%	RQ
Naphthalene	1.3%	100 lbs.

CALIFORNIA PROP 65 STATUS –
Listed (Naphthalene)

16. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

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