

MATERIAL SAFETY DATA SHEET

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CHEMTREC: 1 (800) 424-9300

ESTABLISH LITE™ Herbicide

Revision Date: 10/7/2005

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SECTION I – SUBSTANCE/PREPARATION

Trade Name: Establish Lite Herbicide
Chemical Name: *(S)-2-chloro-N-[(1-methyl-2-methoxy) ethyl]-N-(2,4-dimethyl-thien-3-yl)-acetamide; and 2-chloro-4-ethylamino-6-isopropyl-amino-s-triazine
Synonyms: Mixture of dimethenamid-p and atrazine
Formula: Mixture
Chemical Family: Chloroacetamide and triazine
Mol Wt: Mixture

SECTION II – INGREDIENTS

COMPONENT	CAS NO.	%	PEL/TLV - SOURCE
Dimethenamid-P	163515-14-8	24.1	Not established
*Atrazine	1912-24-9	29.5	5 mg/m(3) (OSHA PEL & ACGIH TLV)
*Ethylene Glycol	107-21-1	4.2	50 ppm (Ceiling limit) (OSHA PEL & ACGIH TLV)
Petroleum solvent, including naphthalene	64742-94-5 91-20-3	1.7 .238	17 ppm recommended by EXXON
Inert Ingredients	N/A		

SARA Title III Section 313: *Listed

SECTION III - PHYSICAL DATA

BOILING/MELTING POINT@760mm Hg: N/D **pH:** 3.64
VAPOR PRESSURE mmHg @ 20°C: < 1 @ 25°C
SPECIFIC GRAVITY OR BULK DENSITY: 9.32 lb/gal
SOLUBILITY IN WATER: Atrazine 33ppm @ 20°C/Dimethenamid 1174 ppm 23°C

APPEARANCE: White liquid slurry

ODOR: Sweet

INTENSITY: Moderate

SECTION IV - FIRE AND EXPLOSION DATA**FLASH POINT (TEST METHOD):** >215°F****AUTOIGNITION TEMP:** N/D**FLAMMABILITY LIMITS IN AIR (% BY VOL):** LOWER: N/D UPPER: N/D**NFPA 704 HAZARD CODES****HEALTH:** 2**FLAMMABLE:** 1**INSTABILITY:** 0**OTHER:****NFPA 30 STORAGE CLASSIFICATION:** Class III B**(flash estimated based on components)**EXTINGUISHING MEDIUM:**

Use water fog, foam, CO(2), or dry chemical extinguishing media.

SPECIAL FIREFIGHTING PROCEDURES:

Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Do not allow fire fighting water to escape into waterways or sewers.

UNUSUAL FIRE EXPLOSION HAZARDS:

There are no known unusual fire or explosion hazards.

Combustion Products: Oxides of sulfur, oxides of nitrogen, hydrogen chloride.**SELECT ACRONYM KEY**

N/A - Not available; N/D - Not determined; N/R - Not rated; N/E - Not established

SECTION V - HEALTH DATA**TOXICOLOGICAL TEST DATA:**

- 0

Rat, Oral LD50 > 500 - < 2000 mg/kg

Rabbit, Dermal LD50 > 4000 mg/kg

Rat, Inhalation LC50 (4 hr) = 5.1 mg/L

Rabbit, Eye Irritation - Moderately Irritating

Rabbit, Skin Irritation (FHSA) - Severe Irritating

Guinea pig, Skin Sensitization - Sensitizer

OSHA, NTP, or IARC Carcinogen: See "Effects of Overexposure" section**EFFECTS OF OVEREXPOSURE:****See Product Label and Directions For Use for additional precautionary statements.**

Precautionary Statements:

Hazards to Humans and Domestic Animals.

"WARNING": Harmful if swallowed or absorbed through the skin, causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield or safety glasses). Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

For a component of this formulation:

Acute overexposure to ethylene glycol can cause severe abdominal distress, CNS depression, possibly respiratory and/or kidney failure.

Chronic Overexposure Effects:

Chronic overexposure to ethylene glycol may lead to liver degeneration and severe kidney damage. Animal studies indicate that ethylene glycol may be embryotoxic and teratogenic by the oral and inhalation routes.

For another component of this formulation:

A National Toxicology Program (NTP) report states that lifetime inhalation exposure to naphthalene resulted in increases in tumors of the nose in rats. In a previous NTP study, lifetime inhalation exposure to naphthalene increased lung tumors in female mice. The relevance of the rodent findings to humans is questionable.

Other Overexposure Effects:

Decreased activity and muscular tremors. Other symptoms are nonspecific. Temporary eye injury or skin irritation may occur. Frequent repeated skin contact may cause a sensitization (allergic) reaction in some individuals.

Existing medical conditions aggravated by exposure to this material:

No information found for this mixture.

Ingestion of naphthalene results in cramps, nausea, vomiting, and diarrhea; listlessness; bladder irritation and brownish urine. Inhalation of naphthalene may cause headache, confusion and excitement. Chronic overexposure to naphthalene may result in liver/kidney disorders. Hemolysis, anemia, fever, hemoglobinuria and jaundice may also occur. Those with prior blood diseases may be more severely affected.

IARC Group 3 (atrazine - not classifiable as to its carcinogenicity to humans)

Acute overexposure to solvent naphtha vapors may cause central nervous system effects, including headache, dizziness, drowsiness, and confusion. Ingestion causes nausea, vomiting, blurred vision, and CNS disorder.

Aspiration of the liquid into the lungs may result in chemical pneumonitis, which may be fatal. Prolonged or repeated skin contact may cause defatting and dermatitis.

FIRST AID PROCEDURES

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

If swallowed: Call a doctor or get medical attention. Do not induce vomiting. Do not drink any liquid. Do not give anything by mouth to an unconscious person. Avoid alcohol.

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention.

Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage. May pose an aspiration pneumonia hazard.

SECTION VI - REACTIVITY DATA

STABILITY:

Stable

CONDITIONS TO AVOID:

N/A

CHEMICAL INCOMPATIBILITY:

Avoid contact with strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: None known to occur at ambient conditions.

HAZARDOUS POLYMERIZATION:

Does not occur.

CONDITIONS TO AVOID:

None known.

CORROSIVE TO METAL: No

OXIDIZER: No

SECTION VII - PERSONAL PROTECTION

Users of a pesticidal end use product should refer to the product label for personal protective equipment requirements.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:**Protective Clothing:**

Users are required to wear long-sleeved shirts and long pants or equivalent, chemical resistant gloves, and boots (waterproofed). In addition, persons involved in mixing/loading operations are required to use heavy duty chemical resistant gloves (rubber, polyvinyl chloride or Viton).

Eye Protection:

Chemical goggles or face shield.

Respiratory Protection:

If mists are generated, wear an approved pesticide respirator for mists to prevent inhalation.

Ventilation:

Use local exhaust to control dusts/mists.

SECTION VIII - ENVIRONMENTAL DATA**ENVIRONMENTAL TOXICITY DATA**

For a similar product:

Rainbow Trout, Static 96 hour LC50 (Dimethenamid) = 2.6 mg/L

Rainbow Trout, Static 96 hour LC50 (Atrazine) = 4.5 - 8.8 mg/L

Bluegill Sunfish, Static 96 hour LC50 (Dimethenamid) = 6.4 mg/L

Bluegill Sunfish, Static 96 hour LC50 (Atrazine) = 1600 mg/L

Daphnia magna, EC50 (Atrazine) = 6.9 mg/L

Daphnia magna, EC50 (Dimethenamid) = 16 mg/L

SARA 311/312 REPORTING

FIRE:No PRESSURE:No REACTIVITY:No ACUTE:Yes CHRONIC:Yes TPQ(lbs): 10,000

SPILL AND LEAK PROCEDURES:

Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal

HAZARDOUS SUBSTANCE SUPERFUND: No

RQ(lbs): 100

WASTE DISPOSAL METHOD:

Waste resulting from the use of this product may be disposed of at an approved waste disposal facility.

HAZARDOUS WASTE 40CFR261: N/A

HAZARDOUS WASTE NUMBER: N/A

CONTAINER DISPOSAL:

Triple rinse (or equivalent) and add rinsate to spray tank. 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 containers are burned, do not inhale smoke.

SECTION IX - SHIPPING DATA - PACKAGE AND BULK

D.O.T. PROPER SHIPPING NAME (49CFR172.101-102): None

HAZARDOUS SUBSTANCE (49CFR CERCLA LIST): Naphthalene **RQ(lbs):** 100

D.O.T. HAZARD CLASSIFICATION (CFR 172.101-102): **PRIMARY** None
SECONDARY None

D.O.T. LABELS REQUIRED (49CFR172.101-102): None

D.O.T. PLACARDS REQUIRED (CFR172.504): None

POISON CONSTITUENT (49CFR172.203(K)): N/A

BILL OF LADING DESCRIPTION
Compounds, Tree or Weed Killing. NOIBN (Herbicide)

CC NO.: **UN/NA CODE:** N/A

SECTION X - ADDITIONAL INFORMATION

Establish Lite™ Herbicide

EPA Reg. No. 7969-200-55467

WARNING

KEEP OUT OF REACH OF CHILDREN

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