

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:

Voluntary Purchasing Groups, Inc.
P.O. Box 460
Bonham, Texas 75418

EMERGENCY TELEPHONE NUMBERS:

(800)424-9300(CHEMTREC, transportation and spills)
(800)900-4044(Poison Control Center, human health)
(800) 345-473S(ASPCA, animal health)

PRODUCT NAME
CHEMICAL NAME

Hi-Yield Grass Killer Postemergence Grass Herbicide
2-{1-(ethoxyimino)butyl}-5-{2-(ethylthio)propyl} -3-hydroxy-2-cyclohexen-1-one
(sethoxydim)

FORMULA
CHEMICAL FAMILY
PRODUCT CODE

C₍₁₇₎ H₍₂₉₎ O₍₃₎ N S
Cyclohexanones
EPA Reg. No. 7969-58-7401

SECTION 2 - COMPOSITION. INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUM8ER	OSHA PEL	ACIGH TLV
*Sethoxydim	18.0	74051-80-2	Not Est.	Not Est.
Petroleum Solvent, including:	74.0	64742-94-5	17ppm	17ppm
*naphthalene	(7)	91-20-3	10ppm	10 ppm
Non-ionic emulsifier	7	9016-45-9	Not Est.	Not Est.
Impurities	1	N/A	Not Est.	Not Est.

*SARA Title III Section 313: Listed

SECTION 3 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Light Amber Liquid
ODOR: Aromatic
BOILING/MELTING POINT: N/D
SPECIFIC GRAVITY: 0.931 g/mL 7.772 lb/gal
pH: 4-5
VAPOR PRESSURE mmHg @ 20°C: 2
WATER SOLUBILITY: Forms emulsion

SECTION 4 - FIRE & EXPLOSION HAZARD

FLASHPOINT (method): 145°F (as solvent)
FLAMMABLE LIMITS (LFL-UFL): Lower: 1.3 @ 70°C Upper: 5.3 @ 103°C
FIRE AND EXPLOSION HAZARD: None
EXTINGUISHING MEDIA: Use water fog, foam, or dry chemical extinguishing media.
FIRE FIGHTING EQUIPMENT: Firefighters should be equipped with self-contained breathing apparatus and turnout gear.
AUTOIGNITION TEMPERATURE: Approximately 443 degrees C
NFPA 704 HAZARD CODES:
HEALTH - 2
FLAMMABLE-2
INSTABILITY-1
OTHER-N/A

SECTION 5 - HEALTH DATA

ACUTE TOXICITY:

Oral LD ₅₀ (rat)	-	4.1 g/kg
Dermal LD ₅₀ (rat)	-	5 g/kg
Inhalation LC ₅₀ (rat) (4 hr)	-	4.6 mg/L
Eye Irritation (rabbit)	-	Moderately Irritating
Skin Irritation (rabbit)	-	Moderately Irritating
Sensitizer (guinea pig)	-	Non-Sensitizing

See Product Label and Directions For Use for Additional Precautionary Statements.

Precautionary Statements

Hazards to Humans and Domestic Animals

EFFECTS OF OVEREXPOSURE: WARNING. Causes substantial but temporary eye injury . Do not get into eyes, or clothing. Inhalation of the mists/vapors results in irritation to the nose, throat and lungs.

For a major component (petroleum solvent) of this formulation: Slightly irritating to the eyes. Prolonged contact with skin may irritate and cause dermatitis. May aggravate an existing skin condition. Inhalation of vapor/aerosol concentrations (>1000 ppm) are irritating to eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death. Small amounts aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possible progressing to death.

A component of this product contains naphthalene. 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.

A National Toxicology Program (NTP) report states that lifetime inhalation exposure to naphthalene resulted in increase in tumors of the nose of rates. 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.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: 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 SWALLOWED - Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor.

IF ON SKIN- 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 first five minutes, then continue rinsing. 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 mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

NOTE – Have the product container or label with you when calling a poison control center or doctor or going for treatment.

SECTION 6 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: Heat, air, moisture

CHEMICAL INCOMPATIBILITY: Oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Including but not limited to oxides of carbon, nitrogen and sulfur.

HAZARDOUS POLYMERIZATION: Does not occur

CORROSIVE TO METAL: No

OXIDIZER: No

SECTION 7 - PERSONAL PROTECTION

PESTICIDE APPLICATORS & WORKERS: Refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard in 40 CFR Part 170.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

RESPIRATORY PROTECTION: Supplied air respirators should be worn if large quantities of vapor are generated or prolonged exposure possible.

EYE PROTECTION: Chemical goggles when respirator does not provide eye protection.

PROTECTIVE CLOTHING - Gloves and protective clothing to minimize skin contact.

VENTILATION - Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

SECTION 8 - ECOLOGICAL INFORMATION

ENVIRONMENTAL TOXICITY: (For active ingredient)

This product has low avian toxicity and is not toxic to bees.

96 hour LC₅₀, Bluegill – 1.6 mg/L

96 hour LC₅₀, Trout – 1.2 mg/L

48 hour LC₅₀, Daphnia – 2.6 mg/L

Environmental toxicity data is not available for formulated product. Active ingredient is not toxic to honeybees when applied topically up to 10 ug/bee or when sprayed on at a concentration simulating exposure to the maximum recommended use rate 2000 ppm.

SARA TITLE III STATUS:

Section 313: Listed

Fire: Yes

Sudden Pressure: No

Reactivity: No

Acute: Yes

Chronic: Yes

TPQ: 10,000 lbs.

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

HAZARDOUS SUBSTANCE SUPERFUND: Yes

WASTE DISPOSAL METHOD: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

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

