

**MATERIAL SAFETY DATA SHEET**

Agricultural Products Group  
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**EMERGENCY TELEPHONE NUMBERS:**

BASF Corporation: 1 (800) 832-HELP

CHEMTREC: 1 (800) 424-9300

Product No.: 598134

Poast Plus® herbicide

Date Prepared: 5/4/1989 Date Revised: 5/20/2002

**SECTION I**

<b>Trade Name:</b> Poast Plus® herbicide	
<b>Chemical Name:</b> 2-{1-(ethoxyimino)butyl}-5-{2-(ethylthio)propyl}-3-hydroxy-2-cyclohexen-1-one	
<b>Synonyms:</b> Sethoxydim, NP-55 (active ingredient), BAS 562 26 H (formulation)	<b>Formula:</b> C(17) H(29) O(3) N S (active ingredient)
<b>Chemical Family:</b> Cyclohexanone	<b>Mol Wt:</b> 327.5 (active ingredient)

**SECTION II - INGREDIENTS**

COMPONENT	CAS NO.	%	PEL/TLV - SOURCE
*Sethoxydim (active ingredient)	74051-80-2	13	Not established
Inerts, including:	N/A	87	
*Naphthalene	91-20-3	(1.3)	10 ppm ACGIH, OSHA 15 ppm STEL ACGIH, OSHA

SARA Title III Section 313: \*Listed

**SECTION III - PHYSICAL DATA**

<b>BOILING/MELTING POINT@760mm Hg:</b> N/D	<b>pH:</b> 3.21 - 3.5 (1% Aq.- 5% Aq.)
<b>VAPOR PRESSURE mmHg @ 20°C:</b> 2	
<b>SPECIFIC GRAVITY OR BULK DENSITY:</b> 0.91 g/mL	7.55 lb/gal
<b>SOLUBILITY IN WATER:</b> Forms emulsion	
<b>APPEARANCE:</b> Clear Liquid	<b>ODOR:</b> Mild Aromatic <b>INTENSITY:</b> Moderate

**SECTION IV - FIRE AND EXPLOSION DATA**

<b>FLASH POINT (TEST METHOD):</b> 188 °F TCC	<b>AUTOIGNITION TEMP:</b> 397° C
<b>FLAMMABILITY LIMITS IN AIR (% BY VOL):</b>	<b>LOWER:</b> 1.3 @ 70° C <b>UPPER:</b> 5.3 @ 103° C

**NFPA 704 HAZARD CODES**

HEALTH: 2 FLAMMABLE: 2 INSTABILITY: 1 OTHER:

NFPA 30 STORAGE CLASSIFICATION: Class III A

<b>EXTINGUISHING MEDIUM</b>	Use water fog, foam, CO(2), or dry chemical extinguishing media.
<b>SPECIAL FIREFIGHTING PROCEDURES</b>	Firefighters should be equipped with self-contained breathing apparatus and turnout gear.
<b>UNUSUAL FIRE EXPLOSION HAZARDS</b>	None

**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:**

For Poast Plus® (formulated product):

- Rat, Oral LD50 > 2200 mg/kg
- Rat, Dermal LD50 > 2000 mg/kg
- Rat, Inhalation LC50 (4 hours) > 7.6 mg/L
- Rabbit, Eye Irritation - Slightly irritating
- Rabbit, Skin Irritation - Slightly irritating
- Guinea pig, Dermal Sensitizer -Non-sensitizing

**EFFECTS OF OVEREXPOSURE:**

**See Product Label and Directions For Use for additional precautionary statements.**

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye injury. 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.

The following special studies have been performed for the active ingredient:

- Teratogenicity (rat and rabbit) - negative
- Reproduction studies (2 generations rat) - negative

For a 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, possibly progressing to death.

For naphthalene (a component of petroleum solvent):

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 and/or 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 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.

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.

Existing medical conditions aggravated by exposure to this material: No information found for this mixture.

**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 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 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 further treatment advice.

**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 by a poison control center or doctor. Do not give anything to an unconscious person.

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

## SECTION VI - REACTIVITY DATA

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Heat, air, moisture

**CHEMICAL INCOMPATIBILITY:** Oxidizing agents

**HAZARDOUS DECOMPOSITION PRODUCTS:** Including but not limited to oxide of carbon, nitrogen and sulfur

**HAZARDOUS POLYMERIZATION:** Does not occur.

**CONDITIONS TO AVOID:** N/A

**CORROSIVE TO METAL:** No

**OXIDIZER:** No

## SECTION VII - PERSONAL PROTECTION

**PESTICIDE APPLICATORS & WORKERS must 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 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, long-sleeved shirt, and slacks.

**Ventilation:**

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

## SECTION VIII - ENVIRONMENTAL DATA

### **ENVIRONMENTAL TOXICITY DATA**

Active Ingredient:

Mallard Duck, Acute LD50 > 2510 mg/kg  
 Mallard Duck, Dietary LC50 > 5620 ppm  
 Bobwhite Quail, Dietary LC50 > 5620 ppm  
 Bluegill Sunfish, (96 hour) LC50 = 265 mg/L  
 Rainbow Trout, (96 hour) LC50 = 170 mg/L  
 Daphnia magna, (48 hour) LC50 = 78.1 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 2,000 ppm.



**SECTION X - ADDITIONAL INFORMATION**

Poast Plus® herbicide

EPA Reg. No. 7969-88

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**Complete Label and Directions For Use are attached to the product.**

**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

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