GREEN LIGHT®
P.O. Box 17985
San Antonio, TX 78217-0985
Office: (210) 494-3481
Fax: (210) 494-5224

Product: WIPE-OUT® TOUGH WEED KILLER FOR LAWNS
EPA Reg. No.: 62719-550-869
Effective Date: 05/01/2008

MATERIAL SAFETY DATA SHEET

Emergency Phone 800/535-5053

Size	Product Number	UPC Code
10 lb.	40410	0 49424 40410 0
10 lb.	40411	0 49424 40410 0

Note: Be sure to compare the EPA registration number as given on the MSDS with the EPA registration number as given on the label as some products have had the active ingredients changed without a corresponding change in the UPC number or in the item description.

1. **INGREDIENTS**:

COMPONENT	CAS NUMBER	W/W%
Penoxsulam	CAS No. 219714-96-2	0.04%

2. **EMERGENCY OVERVIEW**

White solid with no odor. May cause eye irritation. Material is toxic to aquatic organisms and slightly toxic when ingested by avian.

EMERGENCY PHONE NUMBER: 800-992-5994

3. **PHYSICAL DATA:**

APPEARANCE:	Off-white granule
ODOR:	None
MELTING POINT:	N/A
SOLUBILITY IN WATER:	N/A
OCTANOL/WATER PARTITION COEFFICIENT:	N/A

4. **FIRE AND EXPLOSION HAZARD DATA:**

FLASH POINT:	Not applicable (solid)
METHOD USED:	Not applicable
FLAMMABLE LIMITS:	
LFL:	Not determined
UFL:	Not determined
EXTINGUISHING MEDIA:	Water, Dry Chemical fire extinguishers, Carbon dioxide fire extinguishers, Foam.
FIRE FIGHTING PROCEDURES:	Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Fight fire from protected location of safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Move container from fire area if this is possible without hazard. Contain fire water run-off is possible. Fire water run-off, if not contained, may cause environmental damage.
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:	Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

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UNUSUAL FIRE AND EXPLOSION HAZARDS:	Container may rupture from gas generation in a fire situation. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate.
HAZARDOUS COMBUSTION PRODUCTS:	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: sulfur oxides, nitrogen oxides, hydrogen fluoride, fluorinated hydrocarbons, carbon monoxide, and carbon dioxide.

5. **STABILITY AND REACTIVITY DATA**:

STABILITY: (Conditions to Avoid)	Thermally stable at typical use temperatures. Avoid temperatures above 392°F (200°C). Come components of this product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.
INCOMPATIBILITY: (Specific Materials to Avoid)	Avoid contact with oxidizing materials.
HAZARDOUS DECOMPOSITION PRODUCTS:	Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition.
HAZARDOUS POLYMERIZATION:	Will not occur.

6. **ACCIDENTAL RELEASE MEASURES**:

ACTION TO TAKE FOR SPILLS:	Contain spilled material is possible. Sweep up small spills. Collect in suitable and properly labeled containers. Wash exposed body areas thoroughly after handling.

7. **TOXICOLOGICAL INFORMATION**:

POTENTIAL HEALTH EFFECTS:	This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.
EYE:	May cause slight eye irritation. Corneal injury is unlikely.
SKIN:	Prolonged or repeated exposure is not likely to cause significant skin irritation. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD_{50} for skin absorption in rabbits is >5,000 mg/kg. Did not cause allergic skin reactions when tested in guinea pigs.
INGESTION:	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. The oral LD50 for rats is >5,000 mg/kg.
INHALATION:	No adverse effects are anticipated for single exposure to dust. The LC50 for rats is >3.50 mg/L for 4 hours. This was the highest attainable concentration.
SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:	In animals, effects have been reported on the following organs: liver and kidneys.
CANCER INFORMATION:	Did not cause cancer in laboratory animals.
TERATOLOGY (BIRTH DEFECTS):	Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.
REPRODUCTIVE EFFECTS:	In animal studies, did not interfere with reproduction.
MUTAGENICITY:	In-vitro and animal genetic toxicity studies were negative.

8. **FIRST AID:**

EYE:	Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several

	additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
SKIN:	Wash skin with plenty of water.
INGESTION:	No emergency medical treatment necessary.
INHALATION:	Move person to fresh air; if effects occur, consult a physician.
NOTE TO PHYSICIAN:	No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

9. **EXPOSURE CONTROLS/PERSONAL PROTECTION:**

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

EXPOSURE GUIDELINE(S):	None established.
ENGINEERING CONTROLS:	Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.
RECOMMENDAITONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:	
EYE/FACE PROTECTION:	Use safety glasses.
SKIN PROTECTION:	No precautions other than clean body-covering clothing should be needed.
HAND PROTECTION:	Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material skin contact should be minimized.
RESPIRATORY PROTECTION:	In dusty or misty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: particulate filter.
APPLICATORS AND ALL OTHER HANDLERS:	Refer to the product label for personal protective clothing and equipment.

10. **HANDLING AND STORAGE**:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:	Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Handle in ventilated area. Wash thoroughly with soap and water after handling and before eating, chewing gum, using tobacco, using the toilet or smoking. Keep away from food, feed stuffs, and water supplies. Store in original container in a dry area.

11. **DISPOSAL CONSIDERATIONS**:

DISPOSAL METHOD:	If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

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If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

12. **ECOLOGICAL INFORMATION**:

ENVIRONMENTAL DATA:

MOVEMENT & PARTITIONING: Bioconcentration potential is low (BCF is <100 or Low Pow <3).
Potential for mobility in soil is high (Koc is between 50 and 150).
Partition coefficient, n-octanol/water (Log Pow): -0.354 *(measured).*
Henry's Law Constant (H): 1.66E^{-16} atm M^3/mole; 25°C *(estimated)*.
Partition coefficient, soil organic car/water (Koc): 104 *(measured).*

DEGRADATION & PERSISTENCE: The rate constant for vapor phase reaction with photochemically produced hydroxyl radicals at 25°C is estimated to be 6.03E^{-11} cm^3/molecule-sec. In the atmospheric environment, material is estimated to have a tropospheric half-life of 2.130 hrs.

ECOTOXICOLOGY: Material is very highly toxic to aquatic organisms on an acute basis (LC50 or EC50 is <0.1 in most sensitive species tested).
Material is practically non-toxic to birds on an acute basis (LD50 is >2000 mg/kg).
Material is slightly toxic to birds on a dietary basis (LC50 is between 1001 and 5000 ppm).
The LC50 in earthworm *(Eisenia foetida)* is >1000 mg/kg.
Acute contact LD50 for honeybee *(Apis mellifera)* is >100 µg/bee.
Acute oral LD50 in honeybee *(Apis mellifera)* is >110 µg/bee.

13. **TRANSPORT INFORMATION**:

U.S. DEPARTMENT OF TRANSPORTATION
(DOT) INFORMATION: For all package sizes and modes of transportation: This material is not regulated for transport.

14. **REGULATORY INFORMATION**:

U.S. REGULATIONS
SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:
An immediate health hazard
A delayed health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of:
New Jersey
Pennsylvania

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COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND):	To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate as of the effective date given above, Green Light makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Green Light's control. Therefore, users are responsible for determining whether under their own operating conditions the product is suitable for their particular use. Users assume all risks of use, handling, and disposal of the product. The publication or use of, or reliance upon, information contained herein does not relate to the use of this product in combination with any other material or in any other process.