

MATERIAL SAFETY DATA SHEET

Emergency Phone: 414-276-1505
Howard Johnson's Enterprises
700 west Virginia Street
Milwaukee, WI 53204
Effective Date: 01-May-08

LOCK UP* Herbicide

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: LockUp .03% Pro 62719-585

COMPANY IDENTIFICATION:

Howard Johnson's Enterprises
700 west Virginia Street
Milwaukee, WI 53204

2. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Color Appearance 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. COMPOSITION/INFORMATION ON INGREDIENTS:

COMPONENT	CAS NUMBER	W/W%
Penoxsulam	219714-96-2	From .014 to .04
Various Inert carriers	various	From 96.96 to 99.986

4. 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.

5. FIRE FIGHTING MEASURES:

FLASH POINT: None

METHOD USED: Not applicable

FLAMMABLE LIMITS: Not applicable

LFL: Not applicable

UFL: Not applicable

EXTINGUISHING MEDIA: Water, Carbon dioxide, dry chemical or foam

FIRE FIGHTING PROCEDURES:

SPECIAL PROTECTIVE EQUIPMENT FOR

FIREFIGHTERS: Firefighters should wear full protective gear and self-contained breathing apparatus. Contain runoff to prevent pollution. Fumes and smoke from fire may be hazardous.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS COMBUSTION PRODUCTS: None

6. ACCIDENTAL RELEASE MEASURES:

ACTION TO TAKE FOR SPILLS: Sweep up and dispose of in compliance with all Federal, state and local laws.

7. HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

HANDLING: 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. Remove PPE immediately after handling this product. Wash the outside of gloves before removing.

STORAGE: Store in the original container in a dry, temperature controlled area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur.

OSHA PEL: None

ACGIH TLV: None

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

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

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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.

RECOMMENDATIONS 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.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: Granular Solid

ODOR:

BOILING POINT: Not applicable

MELTING POINT: Not applicable

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

SOLUBILITY IN WATER: Partial

SPECIFIC GRAVITY: Not applicable

PERCENT VOLATILITY: Not applicable

pH: Not applicable

VISCOSITY: Free Flowing Granules

EVAPORATION RATE: Not applicable

10. STABILITY AND REACTIVITY:

STABILITY: Stable

INCOMPATIBILITY: Not applicable

HAZARDOUS DECOMPOSITION PRODUCTS: Not applicable

HAZARDOUS POLYMERIZATION: Will not occur

11. 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 LD₅₀ 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.

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 M³/mole; 25°C (estimated).

Partition coefficient, soil organic car/water (Koc): 104 (measured).

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DEGRADATION & PERSISTENCE:

The rate constant for vapor phase reaction with photochemically produced hydroxyl radicals at 25°C is estimated to be $6.03E^{-11}$ cm³/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. DISPOSAL CONSIDERATIONS:

NEVER PLACE UNUSED PRODUCT DOWN ANY INDOOR OR OUTDOOR DRAIN.

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

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION: Not regulated

15. REGULATORY INFORMATION:

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

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

Pennsylvania

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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.

16. OTHER INFORMATION:

MSDS STATUS: New