

MATERIAL SAFETY DATA SHEET

OSHA-MEETS 29 CFR 191.1200 STANDARDS



HMIS HAZARD RATINGS

HEALTH	1	0 = INSIGNIFICANT	3 = HIGH
FLAMMABILITY	0	1 = SLIGHT	4 = EXTREME
REACTIVITY	0	2 = MODERATE	

TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	Not regulated. Compound, Tree or Weed Killing, Powder		
HAZARD CLASS / DIVISION:	None	REF:	Not applicable
IDENTIFICATION NUMBER:	None	LABEL:	NONE REQUIRED

SECTION 1 - PRODUCT / COMPANY IDENTIFICATION

IDENTITY (AS USED ON LABEL AND LIST)

BAKKER Soybean Herbicide

EPA Reg. No.: 74530-15

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MANUFACTURER'S NAME
Helm Agro US, Inc.

EMERGENCY TELEPHONE NUMBER
CHEMTREC (800) 424-9300

ADDRESS (NUMBER, STREET, P.O. BOX)
8295 Tournament Drive, Suite 310

TELEPHONE NUMBER FOR INFORMATION
(901) 312-1525

(CITY, STATE, AND ZIP CODE)
Memphis, Tennessee 38125

DATE PREPARED: April 1, 2004
SUPERSEDES:

SECTION 2 - COMPOSITIONAL INFORMATION

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY; COMMON NAME(S))	CAS #	% (OPTIONAL)	ACGIH PPM	TWA MG/M ³	STEL PPM	HELM PPM	SARA TITLE III	RQ LBS
4-(2,4-dichlorophenoxy) butyric acid	10433-59-7	75.0						
Inert ingredients								

(a) A "YES" in the SARA TITLE III column indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. * Effective 1996.

(b) Indicates an employee's skin exposure shall be prevented or reduced to the extent necessary in the circumstances through the use of gloves, coveralls, goggles, or other appropriate equipment.

(c) The Workplace Hazardous Materials Information System (WHMIS), Canada's version of the Hazard Communication, has determined this product must be disclosed as a hazardous ingredient to the extent described in the regulations.

(d) Indicates the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ) or greater amounts according to 40 CFR 302.

SECTION 3 - HEALTH HAZARD DATA

ROUTES OF ENTRY - SIGNS AND SYMPTOMS OF EXPOSURE	EMERGENCY AND FIRST AID PROCEDURES
INHALATION: Dust may irritate the respiratory tract. No specific information, but probably harmful if inhaled leading to signs and symptoms as described in skin absorption.	Move subject to fresh air. Administer artificial respiration if breathing has stopped. Get medical attention.
SKIN: May be fatal if absorbed through the skin. May lead to nausea, abdominal pain, muscle weakness, myotonia and a drop in blood pressure.	Remove contaminated clothing; wash affected area with soap and water. Launder contaminated clothing before reuse. If irritation persists, seek medical attention.
EYES: Contact with eyes are moderately irritating.	Flush eyes with water for 15 minutes while holding eyelids open. Seek medical attention, if irritation persists.
INGESTION: Harmful if swallowed. May cause nausea, abdominal pain, muscle weakness, myotonia and a drop in blood pressure. May cause burns to the gastroesophageal tract.	If swallowed, dilute by giving 2 glasses of water to drink and induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
HEALTH HAZARDS (ACUTE AND CHRONIC): May be fatal if swallowed or absorbed through the skin. Acute Oral LD ₅₀ (rats) >2950 mg/kg. Acute Dermal LD ₅₀ (rabbits) >2000 mg/kg. No known chronic effects have been established.	
CARCINOGENICITY:	NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Skin irritation may be aggravated in persons with existing skin lesions. Breathing of dusts may aggravate acute or chronic asthma and inflammatory or fibrotic pulmonary disease.

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IDENTITY (AS USED ON LABEL AND LIST) BAKKER Soybean Herbicide	Page 2 of 2 Date: April 1, 2004
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SECTION 4 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED) Noncombustible	FLAMMABLE LIMITS LEL: None UEL: None
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EXTINGUISHING MEDIA CO ₂ , water, water fog, dry chemical, and chemical foam.	AUTOIGNITION TEMPERATURE None
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SPECIAL FIRE FIGHTING PROCEDURES
Wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH-approved or equivalent) and full protective gear. Runoff should be contained.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Thermal decomposition produces noxious fumes that may include hydrogen chloride, chlorine, and organic acids. Pesticide particulates may become airborne.

SECTION 5 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Comply with fire, explosion, safety precaution, personal protective equipment sections of this MSDS before proceeding with cleanup. Absorb material with inert material such as "oil dry" and place in suitable container. Keep out of streams, water supplies, and sewers. Contact Helm or Chemtrec if assistance is needed. For spills in excess of allowable limits (RQ) notify the National Response Center (800) 424-8802; refer to SARA Title III, Section 313 40 CFR 372, and CERCLA 40 CFR 302 for complete regulations concerning reporting requirements.

SECTION 6 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use. Protect containers from abuse and extreme temperatures. Do not store or consume food, drink, or tobacco in areas where they may become contaminated with this material. Minimize body contact with this product as well as all chemicals in general.

SECTION 7 - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): Wear respirator (MSHA/NIOSH-approved or equiv.) suitable for mist or vapor concentrations encountered. Wear self-contained breathing apparatus when handling leaks/spills or when airborne concentrations exceed allowable exposure limits.

VENTILATION
LOCAL EXHAUST: Required to control dust or vapor concentration.
MECHANICAL (GENERAL): Yes

PROTECTIVE GLOVES: Chemical-resistant such as PVC.	EYE PROTECTION: Chemical splash goggles (ANSI Z-87.1 or equiv.)
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OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Protective clothing. Easy access to eye wash facility and safety shower.

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Shower after handling. Wash contaminated clothing before wearing again.

SECTION 8 - PHYSICAL / CHEMICAL PROPERTIES

BOILING POINT Not applicable	BULK DENSITY Approximately 12#/ft ³
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VAPOR PRESSURE (mm Hg) <1 x 10 ⁻⁷ (2,4-DB acid)	pH 2.0 - 4.0
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VAPOR DENSITY (AIR = 1) Not available	EVAPORATION RATE (WATER = 1) Not available
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SOLUBILITY IN WATER Disperses in water	% VOLATILE (BY WEIGHT) <1
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APPEARANCE AND ODOR Light tan powder. Slight phenoxy odor.	FREEZING POINT Not applicable
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SECTION 9 - STABILITY AND REACTIVITY

STABILITY Stable	CONDITIONS TO AVOID: None known
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INCOMPATIBILITY (MATERIALS TO AVOID):
Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:
Noxious fumes such as hydrogen chloride, chlorine, and organic acids.

HAZARDOUS POLYMERIZATION Will not occur.	CONDITIONS TO AVOID: None known
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SECTION 10 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Pesticide that cannot be used according to label directions should be disposed of in accordance with current local, state, and Federal regulations.

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