

MATERIAL SAFETY DATA SHEET

MSDS NUMBER: 67B-6
 PART NUMBER: 67B
 PRODUCT NAME: ORNAMEC GRASS HERBICIDE *Ornamec Grass Herbicide*
 CAS NUMBER: 0
 CHEMICAL NAME: Herbicide EPA Reg. No. 2217-728 MSDS Revision No. 4

SECTION I

MANUFACTURER: PBI/Gordon Corporation	HMIS RATINGS: HEALTH: 2 FIRE: 2 REACTIVITY: 0 PERSONAL PROTECTION: E	
ADDRESS: 1217 West 12th Street Kansas City, MO 64101		
EMERGENCY TELEPHONE NUMBER: (800)424-9300		
INFORMATION TELEPHONE NUMBER: (816)421-4070		
DATE PREPARED: 07/07/93		

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

CAS NUMBER	HAZARDOUS COMPONENT	SUB-		SARA		OSHA PEL	ACGIH TLV	OTHER LIMITS	
		NTP	IARC	PART/2	313			RECOMMENDED	PERCENT
69806-50-4	Fluazifop-p-butyl	N	N	N	N	NI	NI	NI	6.75
95-63-6	1,2,4-Trimethylbenzene	N	N	N	Y	NI	NI	NI	9.60
64742-95-6	Petroleum solvent	N	N	Y	N	400 ppm	NI	NI	13.60
1330-20-7	Xylenes	N	N	Y	Y	435 mg/m ³	434 mg/m ³	NI	7.00
100-41-4	Ethylbenzene	N	N	Y	Y	100 ppm	100 ppm	NI	2.00

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT	>230 deg F	SPECIFIC GRAVITY (H ₂ O = 1)	0.89121
VAPOR PRESSURE (mm Hg.)	<2 @ 20 C	MELTING POINT	NI
VAPOR DENSITY (AIR = 1)	3.6	EVAPORATION RATE (Butyl Acetate = 1)	<1

SOLUBILITY IN WATER: Emulsifiable.

APPEARANCE AND ODOR: Amber liquid; phenolic odor.

OTHER INFORMATION:
 Percent Volatile by vol.: 36
 Viscosity: 3.6 cp at 100 F
 Density at 20 C: 7.43 lb/gal
 Freezing Point: <35 F

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 112 deg F	FLAMMABLE LIMITS:	LEL: 1.1	UEL: 7.0
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EXTINGUISHING MEDIA: Foam, CO₂, dry chemical, water.

SPECIAL FIRE FIGHTING PROCEDURES: Wear positive-pressure breathing apparatus and full protective clothing. Fight fire from maximum distance. Stay up wind and out of low areas.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
 May be ignited by heat, sparks or flame. Vapors may travel along the ground to a distant source of ignition and flash back. Burning may generate poisonous gases. Run-off from fire control area or dilution water may cause pollution. If surface water is contaminated, contact local authorities.

MSDS NUMBER: 678-6
 PRODUCT NAME: ORNAMEC GRASS HERBICIDE

SECTION V - REACTIVITY DATA

STABILITY: Stable.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: May produce gases such as carbon dioxide, carbon monoxide, nitrogen oxides and halogens when burning.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY: Skin contact, Inhalation, Ingestion.

HEALTH HAZARDS (ACUTE AND CHRONIC):

EYES: Contact may cause severe irritation and burning.

SKIN: Contact may cause moderate to severe irritation to the skin.

INHALATION: Moderately irritating/corrosive to the mucous membranes. Inhalation of sprays may cause burning sensations in the respiratory tract, resulting in coughing.

INGESTION: May be severely irritating to the gastrointestinal system, if swallowed.

CHRONIC EFFECTS: Repeated or prolonged overexposure to solvents may cause damage to liver and kidneys and/or depression of the Central Nervous System.

SIGNS AND SYMPTOMS OF EXPOSURE: Inhalation may cause burning in the chest, with coughing. Prolonged inhalation may cause dizziness.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NI

EMERGENCY AND FIRST AID PROCEDURES: EYES: Flush contaminating chemicals from eyes with large amounts of clean water for 10-15 minutes. If irritation persists, seek medical attention.

SKIN: Remove contaminated clothing. Bathe and shampoo with soap and water to remove chemicals from skin and hair. Obtain medical treatment if irritation persists. Launder contaminated clothing separately, prior to reuse.

INHALATION: Remove victim to fresh air. Apply artificial respiration if needed. If irritation persists, seek medical attention.

INGESTION: Contact a physician or Poison Control Center immediately for assistance.

OTHER HEALTH WARNINGS:

Note to physician: There is no specific antidote. If this product is ingested, do not induce vomiting; avoid aspiration of stomach contents during gastric lavage. Provide supportive therapy.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Wear chemical resistant gloves, protective clothing, and safety glasses. For large spills, the use of an organic cartridge respirator (NIOSH/MSHA approved no. TC-23C), with pesticide prefilter is recommended to avoid overexposure by inhalation. Provide good ventilation to the spill area. Contain and absorb spilled material on inert absorbent. Collect into drums; cover and label for disposal. Flush area with water if possible.

WASTE DISPOSAL METHOD: Dispose of DOT drum, waste water and any other waste according to State, Local, and Federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store this product in the original container in a locked storage area inaccessible to children or pets. Do not store near feed, seed, or food; other herbicides, pesticides, or fungicides to avoid cross-contamination. Do not use or store near heat or open flame.

OTHER PRECAUTIONS: This product is toxic to fish. Fluazifop-p-butyl residues can seep through soil and contaminate groundwater. Do not apply where soil is permeable and water table is close to the surface. Do not use this product if spray may drift from the target area.

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SECTION VIII - CONTROL MEASURES

VENTILATION REQUIREMENTS: Good local ventilation is recommended; mechanical ventilation is recommended if exposure limits may be exceeded.

PERSONAL PROTECTIVE EQUIPMENT: RESPIRATORY PROTECTION: If exposure limits may be exceeded, wear a NIOSH/MSHA approved respirator for dusts and mists (NIOSH/MSHA approval no. TC-21C) or an organic cartridge respirator (NIOSH/MSHA approval no. TC-23C).

PROTECTIVE CLOTHING: Wear long sleeves and pants; chemical resistant gloves and shoes.

EYE PROTECTION: Safety glasses, goggles, or face shield.

SECTION IX - ADDITIONAL INFORMATION

ADDITIONAL MANUFACTURER WARNINGS:
TSCA Status: Exempt.

Recommended Hazard Summary (Defined by 29 CFR 1910.1200):
Immediate and delayed health hazard; fire hazard.

Note: NI means Not Indicated.

OTHER PRECAUTIONS AND COMMENTS: The information and statements in this Material Safety Data Sheet are believed to accurately reflect the scientific evidence used in making the hazard determination, but is not to be construed as a warranty or representation for which we assume legal responsibility. Additional information may be necessary or desirable depending on particular, exceptional or variable conditions or circumstances of use or storage or because of locally applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information available to you and must make independent determinations of the suitability of the information for your particular circumstances or conditions and of the completeness of the information available from all sources to assure both the proper use of the material described herein and the safety and health of employees.

**** END MSDS ****