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Material Safety Data Sheet

MSDS No.: 774-1A Version				EPA F							Registration No.: 2217-774	
1. Basic Infor	mation:											
Manufacturer: PBI/Gordon Corporation Address: 1217 West 12th Street City, State Zip: Kansas City, MO 64101-1407 Information Contact: Environmental, Health, & Safety Dep Information Telephone Number: (816)421-4070 Emergency Contact: Chemtrec Emergency Telephone Number: (800)424-9300 Last Update: 12/8/2003			n, & Safety Dept.	NFPA Health 2 Reactivity 2 0 Special					 2 Health 2 Flammability 0 Reactivity B Pers. Protection 			
Chemical State: Chemical Type:	X Liquid Pure	Gas X Mixture	Solid Solid									
2. Ingredients	(ND = Not Di Chemical Name	sclosed)	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits	
618446529		ichlorophenoxy propioni	c 9.24%	N	N	Y	N	N	NI	NI	NI	
1928434	,,	(2-ethylhexyl) ester enoxyacetic acid, isoocty	yl 18.85%	Ν	Ν	Y	Ν	Y	NI	NI	NI	
1918009		anisic acid (Dicamba)	3.01%	Ν	Ν	Ν	Ν	Y	NI	NI	NI	
Hazard Catagory: X Acute X Chronic X Fire Pressure Reactive Hazardous Identification Information: Liquid; ester odor. Eye irritant. Irritant to skin, respiratory and gastrointestinal systems. The International Agency for Research on Cancer (IARC) lists chlorophenoxy herbicides in its Group 2B (limited evidence for carcinogenicity in humans.) The US EPA has given the chlorophenoxy herbicides 2,4-D, 2,4-DP, MCPP, and MCPA a Class D classification (not classifiable as to human carcinogenicity.) More current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic effects and a recent World Health Organization (WHO) review of 2,4-D toxicology has concluded that 2,4-D is not a carcinogen. <i>L</i> . <i>First Aid Measures:</i> Route(s) of Entry: Contact, Inhalation, Ingestion. Health Hazards (Acute and Chronic): EYE: EYE: KIN: Contact may be moderately irritating to the skin. INHALATION: May be irritating to gastrointestinal tract.					 Medical Conditions Generally Aggravated by Exposure: Asthma or skin lesions may be irritated by exposure. Emergency First Aid Procedure: If in eyes: Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice. If on skin: 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 treatment advice. IF SWALLOWED: Call a physician or Poison Control Center immediately. Contains petroleum solvent. Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips to prevent aspiration, and monitor for breathing difficulty. Other Health Warnings: NI 5. Fire Fighting Measures:							
CHRONIC: Repeated or prolonged overexposure may effect the skin, liver, kidneys, muscular or gastrointestinal systems.					n Point:	_	190°F	ะนรมกั		lethod: Clos	sed Cup	
Signs and Symptoms:						sive Li		NI				

Upper Explosive Limit:

NI

Inhalation may cause a burning sensation, with coughing and dizziness.

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Fire Fighting Measures (Continued)

Fire Extinguishing Media:

Foam, CO2, Dry chemical.

Special Fire Fighting Procedures:

Wear positive-pressure breathing apparatus and full protective clothing.

Unusual Fire and Explosion:

Prevent contamination of surface water from fire-control runoff. If pollution occurs, contact local authorities.

6. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Do not touch spilled material. See Section 8 for Personal Protective Equipment. Collect into drums for disposal; cover and label drums. Wash the area with water if possible, and absorb the wash water for disposal.

7. Handling and Storage:

Precautions to be Taken:

Do not contaminate water, food, or feed by storage or disposal STORAGE: Keep from freezing. Store in original container in a locked storage area inaccessible to children and pets.

PHYSICAL OR CHEMICAL HAZARDS: Do not use or store near heat or open flame.

Other Precautions:

ENGINEERING CONTROL STATEMENTS -

Containers over 1 gallon and less than 5 gallons: Persons engaged in open pouring of this product must also wear coveralls or a chemical resistant apron.

Containers of 5 gallons or more: Do not open-pour product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

8. Exposure Controls/Personal Protection:

Ventilation Requirements:

Good local ventilation, or mechanical exhaust.

Personal Protective Equipment:

PROTECTIVE CLOTHING: Wear long pants, long-sleeved shirt, shoes, gloves when mixing, loading or handling this concentrated product.

EYE PROTECTION: Wear face shield or goggles when mixing, loading or handling this concentrated product.

RESPIRATORY PROTECTION: If exposure limits may be exceeded, wear a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a NIOSH approved respirator with any R, P or HE filter.

9. Physical and Chemical Properties:

Boiling Point: NI

Melting Point: NI

Evaporation Rate (Butyl Acetate = 1) : <1

Vapor Pressure (mm Hg.): <10mm Hg

Vapor Density (Air = 1): <1

Specific Gravity (H20 = 1): 0.95247

Solubility in Water: Emulsifiable.

Appearance and Odor: Liquid; ester odor.

Other Information:

pH: <3 (5% by volume of product, mixed in deionized water) Freezing Point: <35°F Viscosity: 13.6 cp at 100°F Density: 7.93 pounds/gallon

Physical and Chemical Properties (Continued)

10. Stability and Reactivity:

Stability:

Stable.

Incompatibility (Materials to Avoid): None known.

Decomposition/By-Products:

If burned, gases such as HCI, carbon monoxide and organochlorides may be liberated.

Hazardous Polymerization: Will not occur.

11. Toxicological Information:

Dermal LD50 (Rabbit): >2,000 mg/kg body weight.

Inhalation LC50 (4Hr.-Rat): >5.29 mg/L

Oral LD50 (Rat): 2154 mg/kg body weight.

Primary Eye Irritation (Rabbit): Considered to be a moderate irritant.

Primary Skin Irritation (Rabbit): Considered to be a moderat irritant.

Dermal Sensitization (Guinea Pig/Buehler Method): No considered a contact sensitizer.

12. Ecological Information:

ENVIRONMENTAL HAZARDS:

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark.

Do not contaminate water when disposing of equipment washwater. When cleaning equipment, do not pour the washwater on the ground; spray or drain over a large area away from wells and other water sources. Do not apply when weather conditions favor drift from target area. Do not contaminate domestic or irrigation waters.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D and 2,4-DP have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D and 2,4-DP pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

If spills occur, collect the material and dispose of by following disposal instructions on this label.

13. Disposal Considerations:

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Disposal Considerations (Continued)

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

For Plastic Containers - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke.

For Metal Containers - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

14. Transport Information:

The following guidelines apply for domestic ground transport. If shipping by air or ocean, please contact our Transportation Dept.

Freight Class: Herbicides, NOI - NMFC #50320

In our current available sizes, this product does not qualify as a Hazardous Material.

15. Regulatory Information:

OSHA STATUS: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS: This product is exempt from TSCA Regulation under FIFRA Section 3(2)(B)(ii) when used as a pesticide.

CERCLA REPORTABLE QUANTITY: 530 pounds of the formulation which contains 100 pounds of 2,4-Dichlorophenoxyacetic acid, isooctyl ester

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: None SECTION 311/312 HAZARD CATEGORIES: Immediate Health Hazard, Delayed Health Hazard, Fire Hazard

SECTION 313 TOXIC CHEMICALS: 2,4-Dichlorophenoxyacetic acid, isooctyl ester CAS# 1928-43-4, Dicamba, CAS# 1918-00-9

RCRA STATUS: When discarded in its purchased form, this product is a listed RCRA hazardous waste and should be managed as a hazardous waste. (40 CFR 261.20-24)

16. Other Information:

REASON FOR ISSUE: To add the CAS No. for the 2,4-DP 2-ethylhexyl ester plus optical isomer.

NOTE: NI means not indicated.

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 EPA Registration No.: 2217-774

Other Information (Continued)

and the safety and health of employees.