

Material Safety Data Sheet

Product Name: Gordon's Super Brush Killer

MSDS No.: 786-1

Version No.: 014

EPA Registration No.: 2217-758

1. Basic Information:

Manufacturer: PBI/Gordon Corporation
Address: 1217 West 12th Street
City, State Zip: Kansas City, MO 64101-1407
Information Contact: Environmental, Health, & Safety Dept.
Information Telephone Number: (816)421-4070
Emergency Contact: Chemtrec
Emergency Telephone Number: (800)424-9300



2	Health
2	Flammability
0	Reactivity
B	Pers. Protection

Last Update: 12/8/2003

Chemical State: Liquid Gas Solid
Chemical Type: Pure Mixture

2. Ingredients:

Trade Secret (ND = Not Disclosed)

CAS No.	Chemical Name	% Range	EHS		IARC		SARA 313 SUB Z	OSHA PEL	ACGIH TLV	Other Limits
			NTP							
618446529	(R)(+)-2-(2,4-Dichlorophenoxy propionic acid), isooctyl (2-ethylhexyl) ester	15.90%	N	N	Y	N	N	NI	NI	NI
1928434	2,4-Dichlorophenoxyacetic acid, isooctyl (2-ethylhexyl) ester	32.45%	N	N	Y	N	Y	NI	NI	NI
1918009	3,6-Dichloro-o-anisic acid (Dicamba)	5.38%	N	N	N	N	Y	NI	NI	NI

3. Hazardous Identification:

Hazard Category:

Acute Chronic Fire Pressure Reactive

Hazardous Identification Information:

Liquid; ester odor.

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.

4. First Aid Measures:

Route(s) of Entry:

Contact, Inhalation, Ingestion.

Health Hazards (Acute and Chronic):

EYES: Causes substantial but temporary eye injury.

SKIN: Contact may be moderately irritating to the skin.

INHALATION: May be irritating to the respiratory system.

INGESTION: May be irritating to gastrointestinal tract.

Signs and Symptoms:

Inhalation may cause a burning sensation with coughing and dizziness.

Medical Conditions Generally Aggravated by Exposure:

Asthma or skin lesions may be irritated by exposure.

Emergency First Aid Procedure:

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

First Aid Measures (Continued)

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.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration preferably mouth-to-mouth. Get medical attention.

Other Health Warnings:

NI

5. Fire Fighting Measures:

Flash Point: 190°F **F.P. Method:** Closed Cup

Lower Explosive Limit: NI

Upper Explosive Limit: NI

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:

See Section 8 for Personal Protective Equipment. Do not touch spilled material. Contain and collect the spilled material using an inert absorbent. Collect into drums for disposal; cover and label drums. Wash

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Accidental Release Measures (Continued)

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.

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

STORAGE: Keep from freezing. Store in original container in a locked storage area inaccessible to children and pets.

Other Precautions:

Engineering Control Statements for WPS Uses:

Containers over 1 gallon and less than 5 gallons in capacity: Mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

Containers of 5 gallons or more in capacity: Do not open-pour from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. (Note: This is not an option in California, see Calif. Code of Regulations, Article 2, Section 6746.) If the contents of a nonrefillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

8. Exposure Controls/Personal Protection:

Ventilation Requirements:

Good local ventilation or mechanical exhaust.

Personal Protective Equipment:

Personal Protective Equipment (PPE):
Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear: • Long-sleeved shirt and long pants • Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber, or viton • Shoes plus socks • Protective eyewear • Chemical-resistant apron when cleaning equipment, mixing or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

PROTECTIVE CLOTHING: Wear long sleeve shirt, long pants, shoes with socks, and chemical-resistant gloves.

EYE PROTECTION: Safety glasses with side shields or safety goggles.

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: >240°F

Melting Point: NI

Evaporation Rate (Butyl Acetate = 1): <1

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

Vapor Density (Air = 1): >1

Specific Gravity (H2O = 1): 1.02610

Solubility in Water: Emulsifiable.

Appearance and Odor: Liquid; ester odor.

Other Information:

pH: <3 (5% by volume of product mixed in deionized water)

Density: 8.55 pounds/gallon

Freezing Point: <35°F

Viscosity: 13.6 cp at 100°F

10. Stability and Reactivity:

Stability:

Stable.

Incompatibility (Materials to Avoid):

None known.

Decomposition/By-Products:

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

Hazardous Polymerization:

Will not occur.

11. Toxicological Information:

Acute Dermal Toxicity LD50: >2,000 mg/kg body weight.

Acute Inhalation Toxicity LC50 (4H): 4.15 mg/L

Acute Oral Toxicity LD50: 1141 mg/kg body weight.

Primary Eye Irritation: Moderate irritant

Primary Dermal Irritation: Moderate irritant

Dermal Sensitization: Not a sensitizer

12. Ecological Information:

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, to areas where surface water is present or to intertidal areas below the mean high tide mark.

Do not contaminate water when disposing of equipment washwaters. 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.

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 burning 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 Department.

Freight Class: Herbicides, NOI - NMFC Class #50320

Proper Shipping Name:

For package sizes less than 51.41 gallons: product is non-regulated.
For package sizes 51.41 gallons or greater: Environmentally Hazardous Substances, Liquid, N.O.S., 9, UN3082, PGIII, RQ (2,4-D)

If shipped in bulk containers (greater than 119 gallons), this product is a Marine Pollutant.

When shipped as a Hazardous Material, label required is Class 9 (Miscellaneous). Placards required on bulk shipments only.

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: 308 pounds of the formulation which contains 100 pounds of Isooctyl ester of 2,4-Dichlorophenoxyacetic acid

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: Isooctyl ester of 2,4-Dichlorophenoxyacetic acid, 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

Other Information (Continued)

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.