

# Material Safety Data Sheet

*Grounds*

Product Name: Q4 Turf Herbicide

MSDS No.: 694-6

Version No.: 001

EPA Registration No.: 2217-886

## 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

Last Update: 1/31/2006

Chemical State:  Liquid  Gas  Solid  
 Chemical Type:  Pure  Mixture



2	Health
1	Flammability
0	Reactivity
B	Pers. Protection

## 2. Ingredients:

 Trade Secret (ND = Not Disclosed)

CAS No.	Chemical Name	% Range	EHS		IARC		SARA 313		OSHA PEL	ACGIH TLV	Other Limits
			NTP		SUB	Z					
84087014	3,7-Dichloroquinoline-8-carboxylic acid (Quinclorac)	5.69%	N	N	N	N	N	NI	NI	NI	
2008391	Dimethylamine Salt of 2,4-dichlorophenoxyacetic acid (2,4-D)	12.02%	N	N	Y	N	N	NI	NI	NI	
2300665	Dimethylamine Salt of 3,6-dichloro-o-anisic acid (Dicamba)	1.38%	N	N	N	N	Y	NI	NI	NI	
122836355	Sulfentrazone	.69%	N	N	N	N	N	NI	NI	NI	

## 3. Hazardous Identification:

Hazard Category:

 Acute  Chronic  Fire  Pressure  Reactive

Hazardous Identification Information:

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:

Skin contact, Inhalation, Ingestion.

Health Hazards (Acute and Chronic):

EYES: Causes moderate eye injury.

SKIN: Moderately irritating to the skin.

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

INGESTION: May irritate the gastrointestinal tract.

Signs and Symptoms:

Inhalation may cause burning in the chest, with coughing. Prolonged inhalation sometimes causes dizziness. Ingestion usually leads to vomiting. Pain in the chest and abdomen, and diarrhea may follow.

## First Aid Measures (Continued)

Medical Conditions Generally Aggravated by Exposure:

Individuals with chronic skin disease or known sensitivity to chlorophenoxy compounds should either avoid using them or take strict precautions to avoid contact. (respirator, gloves, etc.)

Emergency First Aid Procedure:

If swallowed:

- Call a poison control center or doctor immediately for treatment advice.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Have person sip a glass of water if able to swallow.
- Do not give anything by mouth to an unconscious person.

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.

Other Health Warnings:

NI

## 5. Fire Fighting Measures:

Flash Point: 138°F

F.P. Method: PM Closed Cup

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## Fire Fighting Measures (Continued)

Lower Explosive Limit: NI  
Upper Explosive Limit: NI

### Fire Extinguishing Media:

Foam, CO<sub>2</sub>, dry chemical, water. The low flash point of this product is due to a minor component in the mixture. Based on independent laboratory testing of similar products, this product would not sustain combustion as specified in DOT Regulation 49 CFR 173 Appendix H, and, therefore, would not be classified as a combustible liquid.

### Special Fire Fighting Procedures:

Wear positive-pressure breathing apparatus and full protective clothing.

### Unusual Fire and Explosion:

This product does not ignite readily, but may burn at a very high temperature. The fire may produce irritating or poisonous gases. Runoff from fire control area or dilution water may cause pollution. If surface water is contaminated, 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. Contain and absorb spilled material on Dri-Rite, sand or other inert absorbent. Collect into drums; cover and label for disposal. Flush area with water if possible.

## 7. Handling and Storage:

### Precautions to be Taken:

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

### 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 is recommended; mechanical ventilation may be required if exposure limits may be exceeded.

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

### Personal Protective Equipment:

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if absorbed through skin, if swallowed or if inhaled. Avoid contact with skin. Avoid breathing spray mist.

Clothing Requirement Statements For Mixer, Loaders and Applicators: When mixing, loading or applying this product, wear long-sleeved shirt, long pants, socks, shoes, chemical-resistant gloves and eye protection. It is recommended that safety glasses include front, brow, and temple protection. After this product is diluted according to the Directions for Use, protective eyewear (safety glasses) for the applicator is optional (not required).

## Exposure Controls/Personal Protection (Continued)

### Personal Hygiene Statements:

After using this product, rinse gloves before removing, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. Remove saturated clothing as soon as possible and shower.

## 9. Physical and Chemical Properties:

Boiling Point: 212° F Melting Point: NI

Evaporation Rate (Butyl Acetate = 1): <1

Vapor Pressure (mm Hg.): <17@68°F

Vapor Density (Air = 1): >1

Specific Gravity (H<sub>2</sub>O = 1): 1.07230

Solubility in Water: Infinite

Appearance and Odor: Brown liquid; musky odor.

### Other Information:

pH = NI

Density = 8.94 pound/gallon.

Freezing point <35°F

## 10. Stability and Reactivity:

### Stability:

Stable.

### Incompatibility (Materials to Avoid):

Do not mix with acidic materials, as this will ruin the product.

### Decomposition/By-Products:

May produce gases such as HCl, nitrogen oxides, and carbon monoxide when burning.

### Hazardous Polymerization:

Will not occur.

## 11. Toxicological Information:

Mild eye irritant.

## 12. Ecological Information:

### ENVIRONMENTAL HAZARDS:

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. 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 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.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticide 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.

## 13. Disposal Considerations:

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## Disposal Considerations (Continued)

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. 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 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. 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.

## Other Information (Continued)

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.

### **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 113 gallons: product is non-regulated.

For package sizes 113 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:** 832 pounds of the formulation which contains 100 pounds of Dimethylamine 2,4-D

**SARA TITLE III:**

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: None

SECTION 311/312 HAZARD CATEGORIES: Immediate Health Hazard, Delayed Health Hazard

SECTION 313 TOXIC CHEMICALS: Dimethylamine dicamba CAS# 2300-66-5

**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:** New MSDS in the ANSI Z400.1-1998 format

**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