

Material Safety Data Sheet

Product Name: Gordon's Amine 400 2,4-D Weed Killer

MSDS No.: 814-2

Version No.: 013

EPA Registration No.: 2217-2

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
1	Flammability
0	Reactivity
B	Pers. Protection

Last Update: 6/6/00

Chemical State: Liquid Gas Solid
Chemical Type: Pure Mixture

2. Ingredients:

Trade Secret (ND = Not Disclosed)

CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits
2008391	Dimethylamine Salt of 2,4-dichlorophenoxyacetic acid (2,4-D)	46.40	N	N	Y	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: Corrosive. Causes eye damage.

SKIN: Moderately irritating to the skin; may be absorbed through 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.

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 IN EYES: In case of contact, immediately flush eyes with plenty of

First Aid Measures (Continued)

water for 15 minutes. Call a physician at once.
 IF SWALLOWED: Drink 1 or 2 glasses of water. Induce vomiting by touching back of throat with finger. Call a physician at once. Do not induce vomiting or give anything by mouth to an unconscious person.
 IF INHALED: Remove victim to fresh air and apply respiration if indicated.
 IF ON SKIN: Wash promptly with soap and water. Rinse thoroughly.
Other Health Warnings:
 NI

5. Fire Fighting Measures:

Flash Point: 125°F **F.P. Method:**
Lower Explosive Limit: NI
Upper Explosive Limit: NI

Fire Extinguishing Media:
 Foam, CO₂, 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. Fight fire from maximum distance. Stay up-wind and out of low areas.

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. Wear chemical-resistant gloves and shoes, protective clothing, and safety glasses. 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.

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Accidental Release Measures (Continued)

For a large spill, use of a dust/mist respirator, NIOSH/MSHA approval number prefix TC-21C or a chemical cartridge respirator, NIOSH/MSHA TC-23C is recommended.

7. Handling and Storage:

Precautions to be Taken:

STORAGE: Store in original container in a locked storage area inaccessible to children or pets. Keep from freezing. To prevent cross-contamination, do not store near other herbicides, fertilizers, insecticides, fungicides, or near seeds.

Other Precautions:

1. Containers over 1 gallon and less than 5 gallons in capacity must bear the following statement: "Persons engaged in open pouring of this product must also wear coveralls or a chemical resistant apron."
2. Containers of 5 gallons or more in capacity must also bear the following statement: "A mechanical system (probe and pump) 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.

Personal Protective Equipment:

- a. Clothing Requirement Statements: 1) For All Granular Products: "When using this product, wear long-sleeved shirt, long pants, socks, and shoes." 2) Products registered for use on residential and other turf sites (excluding sod farms) by homeowners and other noncommercial users, and for commercial mixer/loader/applifiers when the product is to be applied to a golf course, amine products applied in liquid form and carrying "CAUTION" signal word only must bear the following language: "When using this product, wear long-sleeved shirt, long pants, socks, shoes, and rubber gloves." 3) Products registered for use on residential and other turf sites (excluding sod farms) by homeowners and other noncommercial users, and for commercial mixer/loader/applifiers when the product is to be applied to a golf course, amine products applied in liquid form and carrying "WARNING" or "DANGER" signal word only must bear the following language: "When using this product, wear long-sleeved shirt, long pants, socks, shoes, and rubber gloves, and eye protection. It is recommended that safety glasses include front, brow, and temple protection." 4) Products registered for use on residential and other turf sites (excluding sod farms) by commercial mixer/loader/applifiers (except when the product is to be applied to a golf course), all products applied in liquid form and carrying "CAUTION" signal word only must bear the following language: "When mixing, loading or applying this product, wear long-sleeved shirt, long pants, socks, shoes, and chemical-resistant gloves." 5) Products registered for use on residential and other turf sites (excluding sod farms) by commercial mixer/loader/applifiers (except when the product is to be applied to a golf course), all products applied in liquid form and carrying "WARNING" or "DANGER" signal word only must bear the following language: "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."
- b. Personal Hygiene Statements: 1) For All Granular Products: "After using this product, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water." 2) For All Liquid Products: "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."

RESPIRATORY PROTECTION: If exposure limits may be exceeded,

Exposure Controls/Personal Protection (Continued)

wear a NIOSH/MSHA approved respirator for dusts and mists (TC-21C) or an organic cartridge respirator (NIOSH/MSHA No. TC23-C)

9. Physical and Chemical Properties:

Boiling Point: 214°F

Melting Point: NI

Evaporation Rate (Butyl Acetate = 1) : <1

Vapor Pressure (mm Hg.): <17 (20 C)

Vapor Density (Air = 1): >1

Specific Gravity (H2O = 1): 1.16000

Solubility in Water: Infinite

Appearance and Odor: Brown liquid; amine odor

Other Information:

pH = 7.5-8.5 Viscosity = 12-15cp

Density at 20°C = 9.62 pounds/gallon

Freezing point<35°F

Percent volatiles by volume 45%

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:

EYES: Corrosive. Causes eye damage.

SKIN: Moderately irritating to the skin; may be absorbed through 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.

12. Ecological Information:

ENVIRONMENTAL HAZARDS:

This product is toxic to aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

13. Disposal Considerations:

Material Safety Data Sheet

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Disposal Considerations (Continued)

PESTICIDE DISPOSAL: Do not contaminate water, food, or feed by storage or 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: 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.

Other Information (Continued)

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 26.95 gallons: product is non-regulated.

For package sizes 26.95 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: 215 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: None

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 revise MSDS to 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 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