



**THE ANDERSONS  
MATERIAL SAFETY DATA SHEET**

PRODUCT CODE: APTDGDU4

DATE PREPARED: 02/15/07

**SECTION I: PRODUCT IDENTITY**

PRODUCT NAME: The Andersons Turf Products Duocide G

MFR INFO: The Andersons Lawn Products  
PO Box 119  
Maumee, Ohio 43537

FOR EMERGENCY: (800) 757-8951  
FOR INFORMATION: (419) 891-2957

CURRENT AS OF: 2/15/07

**SECTION II: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION**

| HAZARDOUS COMPONENT                    | OSHA PEL   | ACGIH TLV  |
|--|--|--|
| Sulfate of potash<br>(CAS # 7778-80-5) | 15 mg/m <sup>3</sup> (total)<br>5 mg/m <sup>3</sup> (respirable) | 10 mg/m <sup>3</sup> (inhalable)<br>3 mg/m <sup>3</sup> (respirable) |
| DG Lite carrier<br>(CAS # Not listed)  | 15 mg/m <sup>3</sup> (total)<br>5 mg/m <sup>3</sup> (respirable) | 10 mg/m <sup>3</sup> (inhalable)<br>3 mg/m <sup>3</sup> (respirable) |
| Bifenthrin<br>(CAS # 82657-04-3)       |  |  |
| Carbaryl<br>(CAS # 63-25-2)            |  |  |

**SECTION III: PHYSICAL DATA**

BOILING POINT: NA      EVAPORATION RATE: NA      pH: NA

VAPOR DENSITY: NA      VAPOR PRESSURE: NA

MELTING POINT: NA      SPECIFIC GRAVITY: NA

SOLUBILITY (IN WATER): Partially soluble

APPEARANCE AND ODOR: Tan granular mix, with slight odor

**SECTION IV: FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT: Not flammable FLAMMABLE LIMITS: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding fire; foam is preferred

SPECIAL FIRE FIGHTING PROCEDURES:  
Wear full protective clothing and positive-pressure self-contained breathing apparatus

UNUSUAL FIRE AND EXPLOSION HAZARDS:  
Decomposition products may be toxic; carbaryl may release methyl isocyanate when heated to extremes

**SECTION V: REACTIVITY DATA**

CONDITIONS TO AVOID: Excessive heat (greater than 200°F)

INCOMPATIBILITY: Strong oxidizers, acids, alkalis

HAZARDOUS DECOMPOSITION PRODUCTS: SO<sub>x</sub>, CO<sub>x</sub>, NO<sub>x</sub>, HCl, HF

Product is stable and hazardous polymerization will not occur.

**SECTION VI: PERSONAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION: NIOSH approved pesticide respirator, if required

EYE PROTECTION: Safety glasses with sideshields, goggles, or faceshield are recommended

SKIN PROTECTION: Long sleeves, chemical-resistant (rubber, PVC) gloves recommended

VENTILATION: Local exhaust ventilation recommended; applicators should stand upwind when handling

**SECTION VII: HEALTH HAZARD DATA**

HEALTH HAZARDS: May be irritating to the nose and respiratory tract, and may cause sore throat, coughing and shortness of breath. Skin irritation, including numbing, burning, or tingling sensations, may result from repeated or prolonged exposure. May also be irritating to the eyes, causing redness and watering. Ingestion may result in abdominal pain, nausea, diarrhea, blurred vision, sweating, salivation, muscle twitching, and tremor. Excessive exposures to carbaryl may produce effects associated with cholinesterase inhibition. Signs and symptoms include headache, dizziness, incoordination, muscle twitching, tremors, nausea, diarrhea, abdominal cramps, sweating, pupil constriction, blurred vision, salivation, tearing, tightness in the chest, excessive urination, and convulsions. All symptoms are dose-dependent, rapid in onset, and reversible in time. Bifenthrin overexposure through ingestion may result in nose bleeds, tremors, and convulsions. The active ingredient is moderately toxic by the oral route and slightly toxic by the dermal route.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing eye, skin, or respiratory conditions

**FIRST AID PROCEDURES:**

**IF SWALLOWED:** If victim is alert and not convulsing, give one glass of water to dilute material, but **DO NOT** induce vomiting. Seek immediate medical attention.

**IF INHALED:** Move victim to fresh air. Seek medical attention if irritation persists.

**IF IN THE EYES:** Immediately flush with water for at least 20 minutes. Seek medical attention if irritation persists.

**IF ON SKIN:** Wash affected areas with soap and water. Seek medical attention if irritation persists. Wash contaminated clothing before re-use.

**NOTE TO PHYSICIAN:** Atropine by IV administration is preferable antidote. Oximes may or may not be therapeutic, but is recommended they not be used in place of atropine. Suggest serum / RBC cholinesterase determination. Treat symptomatically.

**CARCINOGENICITY:** None of the ingredients are known / listed carcinogens. However, product may contain trace amounts of crystalline silica and wood dust, which are listed by IARC as a potential human carcinogens.

**SECTION VIII: PRECAUTIONS FOR SAFE HANDLING AND USE**

**SPILL / RELEASE PROCEDURES:** Collect spilled product and store to re-use. Contaminated product and/or environmental media should be recovered and disposed of properly. Bifenthrin is highly toxic to fish and aquatic organisms. Keep out of water bodies.

**WASTE DISPOSAL METHOD:** Dispose of in accordance with all federal, state, and local regulations. Reuse recovered product where possible.

**HANDLING / STORING PRECAUTIONS:** Read product label before handling. Use only as directed on the label. Keep out of the reach of children. Store in a cool, dry, well ventilated area. Do not store near oxidizers.

**SECTION IX: ADDITIONAL INFORMATION**

**ACTIVE INGREDIENT LEVEL (%):** 0.058 as bifenthrin  
2.300 as carbaryl

**SARA INFORMATION:**

**SECTION 302:** Not an "extremely hazardous substance"

**SECTION 313:** Bifenthrin and carbaryl listed

**CERCLA RQ:** 100 pounds (carbaryl)

**RCRA LISTING:** Not listed

**MSDS ID NO:** 5151

**PREPARED BY:** SS

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