

MATERIAL SAFETY DATA SHEET

Agricultural Products Group
 P.O.Box 13528,
 Research Triangle Park, NC 27709
 (919) 547-2000

EMERGENCY TELEPHONE NUMBERS:

BASF Corporation: 1 (800) 832-HELP

CHEMTREC: 1 (800) 424-9300

Product No.: 579650 Pendulum® 2G granule herbicide

Date Prepared: 7/18/2000 Date Revised: 6/25/2002

SECTION I

Trade Name: Pendulum® 2G granule herbicide	
Chemical Name: N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeneamine	
Synonyms: pendimethalin; AC 92,553	Formula: C13 H19 N3 O4
Chemical Family: dinitroaniline	Mol Wt: 281.350

SECTION II - INGREDIENTS

COMPONENT	CAS NO.	%	PEL/TLV - SOURCE
*Pendimethalin	40487-42-1	2.00	3 mg/m(3) - BASF recommended
*N-methylpyrrolidone	872-50-4	2.00	None established
inerts		95.83	None established

SARA Title III Section 313: *Listed

SECTION III - PHYSICAL DATA

BOILING/MELTING POINT@760mm Hg: N/A	pH: 5.29 (2% dispersion)
VAPOR PRESSURE mmHg @ 20°C: N/D	
SPECIFIC GRAVITY OR BULK DENSITY:	39.2 lb/ft(3)
SOLUBILITY IN WATER: Dispersible	
APPEARANCE: Yellow-brown granule	ODOR: fatty musk INTENSITY: moderate

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (TEST METHOD): N/D	AUTOIGNITION TEMP: N/D
FLAMMABILITY LIMITS IN AIR (% BY VOL):	LOWER: N/D UPPER: N/D
NFPA 704 HAZARD CODES	
HEALTH: N/R	FLAMMABLE: N/R INSTABILITY: 0 OTHER: N/R
NFPA 30 STORAGE CLASSIFICATION: N/R	

EXTINGUISHING MEDIUM	Use water fog, foam, CO(2), or dry chemical extinguishing media.
SPECIAL FIREFIGHTING PROCEDURES	Firefighters should be equipped with self-contained breathing apparatus and turnout gear.
UNUSUAL FIRE EXPLOSION HAZARDS	Organic dusts may form an explosive dust/air mixture. Not impact sensitive.

SELECT ACRONYM KEY

N/A - Not available; N/D - Not determined; N/R - Not rated; N/E - Not established

SECTION V - HEALTH DATA**TOXICOLOGICAL TEST DATA:**

Data for the formulated product:

Rat, Oral LD50 (combined sexes) > 5000 mg/kg

Rabbit, Dermal LD50 (combined sexes) > 2000 mg/kg

Rat, Inhalation LC50 (4 hr) - Not available

Rat, Inhalation LC50 (1 hr calculated) - Not available

Rabbit, Eye Irritation - Moderately irritating

Rabbit, Skin Irritation - Moderately irritating

Guinea pig, Dermal Sensitizer - Not a skin sensitizer.

Direct contact of this product with skin or sclera of eye may cause orange-yellow staining which will fade with time.

For pendimethalin:

A marked depression in body weight gain and statistically significant increase in benign thyroid proliferative lesions were observed at the highest dose tested (5000 ppm) in the lifetime (24 month) rat study.

OSHA, NTP, or IARC Carcinogen: See below. The US EPA has classified pendimethalin an oncogenicity rating of "low c" (possible human carcinogen).

EFFECTS OF OVEREXPOSURE:

See Product Label and Directions For Use for additional precautionary statements.

CAUTION: KEEP OUT OF REACH OF CHILDREN

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Harmful if absorbed through the skin.

Existing medical conditions aggravated by this product: None known

FIRST AID PROCEDURES

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

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

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 further treatment advice.

Note to physician: Pendimethalin is a strongly orange-red compound - virtually an aniline dye. Cases have been described of orange-yellow coloration of urine following heavy exposure of workers to the dust of pendimethalin. Despite its structure as both a nitro-compound and aromatic amine, exposure to pendimethalin is NOT associated with methemoglobinemia.

Note: Have the product container or label with you when calling a poison control center or doctor or going for treatment.

SECTION VI - REACTIVITY DATA

STABILITY: Stable. Do not store above 120° F.

CONDITIONS TO AVOID: Store in original container in cool, dry, well ventilated place away from ignition sources, heat or flame.

CHEMICAL INCOMPATIBILITY: Oxidizing agents and strong alkalis

HAZARDOUS DECOMPOSITION PRODUCTS: Including but not limited to oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION: Does not occur.

CONDITIONS TO AVOID: Does not polymerize.

CORROSIVE TO METAL: No

OXIDIZER: No

SECTION VII - PERSONAL PROTECTION

PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions For Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory Protection:

Supplied air respirators should be worn if large quantities of mist/dust are generated or prolonged exposure possible.

Eye Protection:

Chemical goggles when respirator does not provide eye protection.

Protective Clothing:

Gloves and protective clothing as necessary to prevent skin contact.

Ventilation:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

SECTION VIII - ENVIRONMENTAL DATA

ENVIRONMENTAL TOXICITY DATA

For the active ingredient (pendimethalin):

Toxic to fish.

Very toxic to aquatic plants.

Toxic to plants.

If this product is used according to labeled directions, the hazard to fish and non-target plants is very low.

SARA 311/312 REPORTING

FIRE: N PRESSURE: N REACTIVITY: N ACUTE: Y CHRONIC: Y TPQ(lbs): N/R

SPILL AND LEAK PROCEDURES:

In case of large scale spillage of this product, avoid contact, isolate area and keep out animals and unprotected persons. Call CHEMTREC (800 424-9300) or BASF Corporation (800 832-HELP). For a small spill, wear personal protective equipment as specified on the label.

FOR A SOLID SPILL: Sweep solid into a drum for re-use or disposal. Remove personal protective equipment and decontaminate it prior to re-use.

HAZARDOUS SUBSTANCE SUPERFUND: No RQ(lbs): None

WASTE DISPOSAL METHOD:

Pesticide wastes are acutely hazardous. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

HAZARDOUS WASTE 40CFR261: No HAZARDOUS WASTE NUMBER: None

CONTAINER DISPOSAL:

FOR PLASTIC CONTAINERS: Triple rinse (or equivalent) and add rinsate to the spray tank. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

FOR BULK CONTAINERS: Reusable containers should be returned to the point of purchase for cleaning and re-filling.

FOR MINIBULK CONTAINERS: Clean all tanks on an approved loading pad so rinsate can be collected and mixed into the spray solution or into a dedicated tank. Using a high pressure sprayer, rinse several times with small volumes of water to minimize rinsate.

SECTION IX - SHIPPING DATA - PACKAGE AND BULK

<p>D.O.T. PROPER SHIPPING NAME (49CFR172.101-102): None</p>	<p>HAZARDOUS SUBSTANCE (49CFR CERCLA LIST): RQ(lbs): None</p>
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<p>D.O.T. HAZARD CLASSIFICATION (CFR 172.101-102): PRIMARY None</p>	<p>SECONDARY</p>
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<p>D.O.T. LABELS REQUIRED (49CFR172.101-102): None</p>	<p>D.O.T. PLACARDS REQUIRED (CFR172.504):</p>	<p>POISON CONSTITUENT (49CFR172.203(K)):</p>
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BILL OF LADING DESCRIPTION
Compounds, tree or weed killing (herbicides), NOIBN
This product is not regulated by the Department of Transportation.

<p>CC NO.: Not applicable</p>	<p>UN/NA CODE:</p>
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SECTION X - ADDITIONAL INFORMATION

Pendulum® 2G granule herbicide

EPA Reg. No. 241- 375

KEEP OUT OF REACH OF CHILDREN

CAUTION

Complete Label and Directions For Use are attached to the product.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

BASF Corporation

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