

BASF**BASF Corporation**

Material Safety Data Sheet

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 BOTH NUMBERS ARE AVAILABLE DAYS, NIGHTS, WEEKENDS, & HOLIDAYS.

SECTION 1 - PRODUCT INFORMATION

PENDULUM® 3.3 EC HERBICIDE

Product ID: NVA 579649

Common Chemical Name:

N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeamine

Synonyms:

pendimethalin; AC 92,553

Molecular Formula:

C(13) H(19) N(3) O(4)

Chemical Family: Dinitroaniline Herbicides

Molecular Wt.: 281.4

SECTION 2 - INGREDIENTS

Chemical Name:		CAS	Amount	
PENDIMETHALIN		40487-42-1	37.4	%
BASF 8HR, EXP. LIMIT	TWA	3	MG/CU. M	
SOLVENT NAPHTHA, PETROLEUM		64742-94-5	51.6	%
BASF 8HR, EXP. LIMIT	TWA	100	PPM	
INERTS		INERTS	10.7	%
PEL/TLV NOT ESTABLISHED				
NAPHTHALENE		91-20-3	7.2	%
ACGIH TLV	STEL	15	PPM	
	TWA	10	PPM	
ETHANE, 1,2-DICHLORO-		107-06-2	0.3	%
ACGIH TLV	TWA	10	PPM	
OSHA PEL	CEIL	100	PPM	
	STEL	200	PPM	
	TWA	50	PPM	

SECTION 3 - PHYSICAL PROPERTIES

Color: Dark amber
 Form/Appearance: Liquid
 Odor: Aromatic
 Odor Intensity: Moderate
 Typical Low/High U.O.M.
 Specific Gravity: 1.07
 pH: 6 - 7 SU
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SECTION 3 - PHYSICAL PROPERTIES (cont)

	Typical	Low/High	Deg.	@	Pressure
Boiling Pt:	~ 244		C	760	MM HG
Freezing Pt:	NOT AVAILABLE				
Decomp. Tmp:	~ 244		C	100	MM HG
Solubility in Water Description:	Emulsifiable				
Vapor Pressure:	~ 5.6	MM HG	X	25	DEG. C XX

SECTION 4 - FIRE AND EXPLOSION DATA

	Typical	Low/High	Deg.	Method
Flash Point:	~ 201		F	PENSKY-MARTINS CLOSED-C
Autoignition:	~ 375		C	DIRECT READING INSTRUMENT

Extinguishing Media:

Use water fog, foam or dry chemical extinguishing media.

Fire Fighting Procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

Unusual Hazards:

There are no known unusual fire or explosion hazards.

SECTION 5 - HEALTH EFFECTS

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Toxicology Test Data:

Rat, Oral LD50 - 3956 MG/KG
 Data for Formulated Product
 Rabbit, Dermal LD50 - > 2200 MG/KG
 Data for Formulated Product
 Rat, 4 hr Inhalation LC50 - > 5.35 MG/L
 Data for Formulated Product
 Rat, 1 hr Inhalation LC50 - > 21.4 MG/L
 Data for Formulated Product
 Rabbit, Skin Irritation (FHSA) -
 Mildly Irritating
 Rabbit, Eye Irritation -
 Mildly Irritating
 Guinea Pig, Skin Sensitization -
 Not a sensitizer

Acute Overexposure Effects:

Avoid contact with skin, eyes, and clothing.

May cause eye irritation.

A National Toxicology Program (NTP) report states that a lifetime inhalation exposure to naphthalene resulted in increases in tumors of the nose in rats. In a previous NTP study, lifetime inhalation exposure to naphthalene increased lung tumors in female mice. The relevance of the rodent findings to humans is questionable.

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SECTION 5 - HEALTH EFFECTS (cont)

Ingestion of naphthalene results in cramps, nausea, vomiting and diarrhea, listlessness, bladder irritation and brownish urine. Inhalation of naphthalene may cause headache, confusion and excitement.

Acute overexposure to solvent naphtha vapors may cause central nervous

system effects, including headache, dizziness, drowsiness, and confusion. Ingestion causes nausea, vomiting, blurred vision, and CNS disorders. Aspiration of the liquid into the lungs may result in chemical pneumonitis, which may be fatal.

Prolonged or repeated skin contact may cause defatting and dermatitis.

Harmful if swallowed or absorbed through skin.

CAUTION! KEEP OUT OF REACH OF CHILDREN.

Causes moderate eye irritation.

The US EPA has classified pendimethalin an oncogenicity rating of "low C" (possible human carcinogen).

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) study.

Petroleum solvent (64742-94-5). Slightly irritating to the eyes. Prolonged contact with skin may irritate and cause dermatitis. May aggravate an existing skin condition. Inhalation of vapor/aerosol concentrations (> 1000 ppm) are irritating to eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death. Small amounts aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

At high oral doses in rats, this component caused damage to the stomach, liver, thyroid and urinary bladder. These effects are not relevant to humans at occupational levels of exposure.

Chronic Overexposure Effects:

Chronic overexposure to naphthalene may result in liver and/or kidney disorders. Hemolysis, anemia, fever, hemoglobinuria and jaundice may also occur. Those with prior blood diseases may be more severely affected.

Other Overexposure Effects:

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

Ethylene dichloride listed - IARC Group 2B (Possibly carcinogenic to humans); NTP - Reasonably anticipated to be a human carcinogen.

First Aid Procedures - 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.

First Aid Procedures - Eyes:

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

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SECTION 5 - HEALTH EFFECTS (cont)

First Aid Procedures - Ingestion:

If swallowed, dilute with water. DO NOT INDUCE VOMITING. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

First Aid Procedures - Inhalation:

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.

First Aid Procedures - Notes to Physicians:

Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Because of increased risk of chemical pneumonia or pulmonary edema caused by aspiration of the hydrocarbon solvent, vomiting should be induced only under professional supervision. 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.

First Aid Procedures - Aggravated Medical Conditions:

No information found for this mixture.

First Aid Procedures - Special Precautions:

None

Other First Aid Procedures:

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

SECTION 6 - REACTIVITY DATA

Stability Data:

Stable. Do not store below 40 degrees F or above 120 degrees F.

Incompatibility:

Oxidizing agents, strong alkali.

Conditions/Hazards to Avoid:

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

Hazardous Decomposition/Polymerization:

Including but not limited to oxides of carbon and nitrogen.

Corrosive Properties:

Not corrosive.

Oxidizer Properties:

Not an oxidizer

SECTION 7 - PERSONAL PROTECTION

Clothing:

Gloves and protective clothing as necessary to minimize skin contact.

Eyes:

Chemical goggles when respirator does not provide eye protection.

Respiration:

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

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SECTION 7 - PERSONAL PROTECTION (cont)

Ventilation:

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

Explosion Proofing:

None required.

Other Personal Protection Data:

RECOMMENDATIONS ABOVE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS.

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.

SECTION 8 - SPILL-LEAK/ENVIRONMENTAL

General:

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 LIQUID SPILL: Dike and contain the spill with inert material (sand, earth, etc) and transfer the liquid & solid diking materials to separate containers for disposal.

FOR A SOLID SPILL: Sweep solid into drum for re-use or disposal.

Remove personal protective equip. & decontaminate it prior to reuse.

Waste Disposal:

Pesticide wastes are acutely hazardous. 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 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) & add rinsate to spray tank. Offer for recycling or reconditioning, or puncture & dispose of in sanitary landfill, or by incineration, or if allowed by state & 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 & 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.

Environmental Toxicity Test Data:

TEST DESCRIPTION NOT FOUND -

For active ingredient (pendimethalin):

TEST DESCRIPTION NOT FOUND -

Toxic to fish

TEST DESCRIPTION NOT FOUND -

Very toxic to aquatic plants.

TEST DESCRIPTION NOT FOUND -

Toxic to plants

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SECTION 8 - SPILL-LEAK/ENVIRONMENTAL (cont)

TEST DESCRIPTION NOT FOUND -

Not readily biodegradable

TEST DESCRIPTION NOT FOUND -

Used according to label directions

TEST DESCRIPTION NOT FOUND -

Low hazard to fish and non-target plants

SECTION 9 - STORAGE AND HANDLING

General:

Protect from freezing.

Store in original container separate from other pesticides, fertilizers, food and feed.

SECTION 10 - REGULATORY INFORMATION

TSCA Inventory Status

Listed on Inventory:

NO

Not Listed, TSCA Exempt:

YES

FDA Only: NO

FIFRA Only: YES

SARA - 313 Listed Chemicals:

CAS: 40487-42-1

AMOUNT: 37.4 %

NAME: PENDIMETHALIN
 CAS: 91-20-3 AMOUNT: 7.2 %
 NAME: NAPHTHALENE
 CAS: 107-06-2 AMOUNT: 0.3 %
 NAME: ETHANE, 1,2-DICHLORO-

RCRA Haz. Waste No.: D028

CERCLA: YES Reportable Qty.: (If YES)

XXXXXXX XXXXXXXXXXXXXXXX 100 LBS

EPA Registration No.: 241-341

SECTION 11 - TRANSPORTATION INFORMATION

DOT Proper Shipping Name:

SEE BELOW

DOT Technical Name:

DOT Primary Hazard Class:

SEE BELOW

DOT Secondary Hazard Class:

DOT Label Required:

SEE BELOW

DOT Placard Required:

SEE BELOW

DOT Poison Constituent:

BASF Commodity Codes:

UN/NA Code: 3082 E/R Guide: 171

Bill of Lading Description:

< 154 GALLONS NOT REGULATED BY THE DEPARTMENT OF TRANSPORTATION

> 154 GALLONS, RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(NAPHTHALENE), 9, UN3082, PG III

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SECTION 11 - TRANSPORTATION INFORMATION (cont)

CLASS:	P. G.	SHIPPING NAME:
IATA:		SEE BILL OF LADING DESCRIPTION
IMO: 9	III	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQ (PENDIMETHALIN), MARINE POLLUTANT
TDG:		SEE BILL OF LADING DESCRIPTION

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