



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Pendimethalin Technical  
CAS No : 40487-42-1  
Use : Herbicide  
Company Info : M/s HPM Chemicals & Fertilizers Ltd  
209-210, Anupam Bhawan, Commercial Complex  
Azadpur, Delhi-110033  
Telephone : (011)-45071800, 899  
Fax : (011)- 27681800  
Website : [www.hpmindia.com](http://www.hpmindia.com)  
E-mail : [info@hpmindia.com](mailto:info@hpmindia.com)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition	Concentration
Pendimethalin a.i.	90.00% min.
Other associates impurities	10.00% max

## 3. HAZARDS IDENTIFICATION OF PREPARATION

Stability: Stable

Conditions to Avoid: Avoid all sources of ignition: Heat, sparks, open flame; extreme temperatures; prolonged exposure to extreme heat; contamination; electrostatic discharge; prolonged storage

Incompatibility: Oxidizing agents, strong alkalies

Hazardous Decomposition Products: No hazardous decomposition products if stored & handled as prescribed/indicated.

Hazardous Polymerization: Will not occur

## 4. FIRST AID MEASURES

**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 do so by a poison control center or doctor. 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 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**If on Skin or** Take off contaminated clothing. Rinse skin

**Clothing:** immediately with plenty of water for 15 to 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 further treatment advice.



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

### **5. ACCIDENTIAL RELEASE**

Steps to be taken in case of material leak or spill Contain spills and prevent runoff or entering of waterways. Assure protective equipment is worn. Pick up spills with absorbent material and place in suitable containers.

Waste Disposal Method Dispose of in accordance with Local, State, and Federal Regulations.

### **6. FIRE-FIGHTING MEASURES**

Flash Point: >200°F

Extinguishing Media: Foam, dry extinguishing media, CO<sub>2</sub>, water spray

Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus & turnout gear. Stay upwind.

### **7. HANDLING AND STORAGE**

- Handling** : Use appropriate (impervious) clothing, gloves and closed foot ware to prevent the repeated contact with skin. Use flash proof and dust resistant goggles to prevent the contact with eyes.
- Storage** : Keep the product in original container tightly closed and correctly labeled. Store in suitable, cool, dry, well ventilated place under lock and key; away from the reach of the children, animals, food and animal feeding stuffs. Store away from the incompatible substances and source of ignition

### **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

- Technical protective measures** : None
- Exposure controls limits** : Not Established
- Respiratory protection** : Wear suitable mask
- Hand protection** : Wear impervious gloves
- Eye protection** : Wear flash proof and dust resistant goggles.
- Skin protection** : Wear impervious clothing and closed foot ware.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**



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Boiling Point: N/A Specific Gravity: 1.17 g/ml  
Vapor Pressure: mPa@25°C % Volatiles: N.K.  
Vapor Density: N.K. Solubility in Water: 0.225  
ppm@25°C  
pH: N/A Appearance/Odor: Dark amber  
solid, mild odor

### **10. STABILITY AND REACTIVITY**

Stability: Stable

Conditions to Avoid: Avoid all sources of ignition: Heat, sparks, open flame;  
extreme temperatures; prolonged exposure to extreme heat; contamination; electrostatic  
discharge; prolonged storage

Incompatibility: Oxidizing agents, strong alkalies

Hazardous Decomposition Products: No hazardous decomposition products if stored & handled as  
prescribed/indicated.

Hazardous Polymerization: Will not occur

### **11. TOXICOLOGICAL INFORMATION**



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Carcinogenicity: Long term rat study = substance induced thyroid tumors; long term mice study = no effect observed; Low human exposure = no carcinogenic risk

Toxicity Data: Oral: LD50 (rat): 3,956 mg/kg;

Inhalation: LC50 (Rat): 320 mg/l

N.F.P.A.: Health: 2; Fire: 1; Reactivity: 1

(Rating: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Insignificant)

Effects of Overexposure: May aggravate existing skin conditions.

Avoid ingestion. Hazardous by inhalation.

Inhalation High vapour concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, and may have other central nervous system effects. When applying the product as a spray avoid breathing in spray mist.

Ingestion

The concentrate is of low toxicity if swallowed. If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.

Skin The concentrate is not considered a serious toxic hazard. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.

Eye

The concentrate may cause irritation after short contact with the eyes, but permanent damage is not anticipated.

Chronic Effects

Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

Reproductive Toxicity Data indicates no reproductive effects. Data indicates no teratogenic effects.

Mutagenicity Data indicates no mutagenic effects.

Carcinogenicity

A marked depression in body weight and a statistically significant increase in benign thyroid tumors (follicular adenomas) were observed at the highest dose level (5000ppm) in a lifetime (24 month) rat study, not considered to be relevant to humans. (1)

### 12 ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment

The product is a marine pollutant for sea transport.

Other Precautions Do not contaminate dams, waterways or sewers with this product.

Do not spray in high winds.

Environ. Protection Spray drift can cause damage, read the label for more information.

Acute Toxicity - Fish

Toxic to fish. LC50 (96hr) for rainbow trout is 0.14 mg/l.

LC50 (96hr) for bluegill sunfish is 0.2 mg/l.

LC50 (96hr) for channel catfish is 0.42 mg/l.

Acute Toxicity -

Other Organisms

Dietary LC50 (8d) for bobwhite quail is 4187 mg/kg

LD50 for mallard duck is 10388 mg/kg

Bees: Not toxic to bees. LD50 >100 µg/bee



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### 13. DISPOSAL CONSIDERATION

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed on site (by use according to the label) or at an approved waste disposal facility. Further information can be obtained from the EPA or the equivalent state and local agencies.

**CONTAINER DISPOSAL:** Completely empty bag into application equipment. Check with EPA, State, and local authorities for the current regulations applicable to your area for disposal of waste containers.

### 14. TRANSPORT INFORMATION

Transport Information ; Not classified as Dangerous Goods, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Storage and Transport Considered non dangerous for road and rail transport (in packaging, including IBCs not greater than 3000 Lt each) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01.

For bulk shipments as Class 9, use UN 3082, HazChem code 2Z.

UN Number (Sea Transport) 3082

IMO Class/Packing

Group

Class 9; Packing Group III

IMO Marine

Pollutant

Marine Pollutant

IMO Proper

Shipping Name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(contains Pendimethalin)

### 15. REGULATORY INFORMATION

Poisons Schedule S5

Packaging & Labelling

CAUTION

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Hazard Category Harmful,Irritant

AICS (Australia)

All of the components in this product are listed on the Australian Inventory of Chemical Substances.

### 16. OTHER INFORMATION



## **MATERIAL SAFETY DATA SHEET**

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.