


Safety Data Sheet

PENCOMAX 200 EW

L7879 (Act No 36 of 1947)
Namibian Reg. No. N-AR 1554

1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	PENCOMAX 200 EW
Other means of identification:	Penconazole 200 g/L EW
Chemical Name:	1-(2,4-dichloro- β -propylphenethyl)-1H-1,2,4-triazole
Recommended use:	Fungicide
Restrictions on use:	Agriculture
UN No:	3082
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056
Emergency Number:	POISON CENTRE (Uwww.agritech.co.za NITAS HOSPITAL) 012 664 1100 TYGERBERG:021 931 6129 RED CROSS: 021 689 5227 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
2) HAZARDS IDENTIFICATION	
Classification of the substance/mixture:	Acute Toxicity (Oral) Category 4 Acute Toxicity (Dermal) Category 4 Acute Toxicity (Inhalation) Category 3 Reproductive Toxicity Category 2 Aspiration Toxicity Category 1 Aquatic Acute Category 1 Aquatic Chronic Category 1
Label Elements: Globally Harmonized System, EU (GHS):	<p>Pictograms:</p>  <p>Signal words: Danger</p> <p>Hazard Statements: H302: Harmful if swallowed. H304: May be fatal if swallowed and enters airways. H361d: Suspected of damaging the unborn child. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long-lasting effects.</p> <p>Precautionary Statements: P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P260: Do not breathe dust/mist/spray. P262: Do not get in eyes, on skin, or on clothing. P270: Do not eat, drink or smoke when using the product. P272: Contaminated work clothing should not be allowed out of the workplace.</p>

<p>According to Directive 67/548/EEC No. 1272/2008 [CLP]</p>	<p>P273: Avoid release to the environment. P280: Wear protective gloves, protective clothing, eye protection. P321: Specific treatment (See First aid measures on this label) P362+P364: Take off contaminated clothing and wash it before reuse. P405: Store locked up.</p> <p>Hazard Symbol(s): Xn – dangerous to health Xi - Irritant N – dangerous for the environment</p> <p>R-phrases(s): R20/22: Harmful by inhalation and if swallowed. R36/37/38: Irritating to eyes, respiratory system and skin. R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>S-phrases(s): S2: Keep out of reach of children. S13: Keep away from food, drink and animal feeding stuffs. S16: Keep away from sources of ignition: No smoking. S20/21: When using, do not eat drink or smoke. S23: Do not breathe vapour/spray. S24/25: Avoid contact with skin and eyes. S36/37/39: Wear suitable protective clothing, gloves and eye/face protection. S61: Avoid release to the environment.</p>
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3) COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Not applicable

3.2 Mixtures:

Chemical name	Concentration	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)
Penconazole	200 g/L	66246-88-6	266-275-6	Acute Tox 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Repr. 2 (H361d)
Solvent naphtha (petroleum), heavy arom.	25%	64742-94-5	265-198-5	Asp. Tox 1 (H304)

4) FIRST AID MEASURES

Description of First-Aid Measures:

Inhalation:

Unlikely to cause harmful effects under normal conditions and use. Remove patient to fresh air. Loosen clothing around neck. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.

Skin contact:

Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Do not rub skin. Persons providing first aid must wear gloves to avoid selfcontamination. Seek medical assistance if irritation occurs.

Eye contact:

Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance immediately.

Ingestion:


Harmful if swallowed. Rinse mouth. Administer medicinal charcoal repeatedly together with plenty of water. Never give anything by mouth to an unconscious person. Induce vomiting. For advice, contact the National Poisons Centre. Seek medical assistance immediately.

Most important symptoms and effects, both acute and delayed:

Aspiration may cause pulmonary oedema and pneumonitis.

Indication of any immediate medical attention and special treatment needed:	No specific antidote known. Treat symptomatically. Repeatedly administer medicinal charcoal in a large quantity of water.
5) FIRE-FIGHTING MEASURES	
Extinguishing Media: Unsuitable Extinguishing Media: Specific Hazards arising from the substance/mixture: Fire Fighting: Protective clothing:	<p>Fine water spray, foam, carbon dioxide.</p> <p>Do not use high volume water jet, due to contamination risk.</p> <p>Generates poisonous and corrosive fumes such as carbon oxides, nitrous gases and hydrogen chloride.</p> <p>Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal.</p> <p>Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Do not scatter the material. Avoid pollution of waterways. Keep upwind.</p> <p>Fire may produce irritating or poisonous vapours, mists or other products of combustion. Fire-fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.</p>
6) ACCIDENTAL RELEASE MEASURES	
Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and material for containment and cleaning up:	<p>Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use.</p> <p>Do not contaminate waterways, drains and groundwater. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately. Considered as Marine Pollutant.</p> <p>Wear protective clothing. Clear area of unprotected personnel. Contain and absorb liquid spills with inert material, remove by scoop or vacuum. Use approved industrial vacuum cleaner for removal and place in waste containers. Wash area with water and detergent and absorb with further inert material. Heavily contaminated soil layers have to be dug out down to clean soil. If spill does enter waterways contact the local authority. Spilled product cannot be re-used and must be disposed of by incineration or disposal in a chemical waste disposal facility. If containers cannot be recycled, they should be disposed of together with the waste chemical. Generating poisonous and corrosive fumes.</p>
7) HANDLING & STORAGE	
Precautions for Safe Handling: Conditions for Safe Storage, including any incompatibilities:	<p>Avoid skin and eye contact and inhalation of spray mist. Avoid inhalation of fog and vapours. Keep away from heat and sources of ignition. Take precautionary measures against static discharges (transfer operations: check grounding). May form explosive vapour-air mixtures. Spills may be slippery and should be cleaned up immediately.</p> <p>APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor.</p> <p>BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.</p> <p>Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Keep away from children or uninformed persons. Max. Storage Temperature: 35 °C Min. Storage Temperature: -5 °C</p>
8) EXPOSURE CONTROL / PERSONAL PROTECTION	

Appropriate Engineering Controls:	It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.			
Control Parameters: Occupational exposure limits:	Ingredient	CAS#	Limit	Basis
	Penconazole	66246-88-6	2 mg/m³	TWA (Syngenta)
	Solvent naphtha (petroleum), heavy aroma.	64742-94-5	8 ppm 50 mg/m³	TWA
<u>PERSONAL PROTECTIVE EQUIPMENT:</u> Clothing:	Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance. Respiratory protection: Respirator with filter for organic vapour.			
Gloves:	Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance.			
Eye protection:	The use of safety goggles with side shields is recommended.			
Emergency eye wash:	Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.			
9) PHYSICAL & CHEMICAL PROPERTIES				
Form:	Liquid			
Colour:	White			
Odour:	Characteristic			
Solubility:	Emulsifies in water.			
pH:	6.8			
Odour threshold:	Not available			
Melting point / Freezing point	60.3 – 61°C (Penconazole)			
Initial boiling point and boiling range	>360°C/760 mmHg (Penconazole)			
Flash point:	>40°C			
Evaporation rate:	Not available			
Flammability (solid, gas)	Not available			
Upper/ lower flammability or explosive limits:	Not explosive			
Vapour pressure:	0.37 mPa @ 25°C (Penconazole)			
Vapour density:	Not available			
Relative density:	1.007 g/ml			
Partition coefficient: n-octanol/water	Log K _{ow} 3.1 @ pH 5.7 (Penconazole)			
Auto-ignition temperature:	Not available			
Decomposition Temperature:	Not available			
Viscosity:	Not available			
10) STABILITY & REACTIVITY				
Reactivity:	No hazardous reactions if stored and handled as indicated.			
Chemical Stability:	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.			
Possibility of hazardous reactions:	None under normal conditions.			
Conditions to avoid:	Avoid direct sunlight, open flames and sources of heat.			
Incompatible materials:	Strong bases.			
Hazardous decomposition product(s):	Heating can release vapours which can be ignited. Combustion products are toxic and/or irritant.			

11) TOXICOLOGICAL INFORMATION	
Acute Toxicity:	
Oral:	LD ₅₀ > 3 000 mg/kg, rat.
Dermal:	LD ₅₀ > 4 000 mg/kg, rabbit.
Inhalation:	LC ₅₀ (4h) > 5.3 mg/L, rat.
Skin Corrosion/Irritation:	May cause mild irritation.
Serious Eye Damage/Irritation:	May cause mild irritation.
Respiratory or Skin Sensitization:	Did not cause sensitization on laboratory animals.
Germ Cell Mutagenicity:	Not mutagenic.
Carcinogenicity:	Not oncogenic.
Reproductive Toxicity:	Suspected of damaging the unborn child.
STOT-SE:	No data available.
STOT-RE:	No data available.
Aspiration Hazard:	May be fatal if swallowed and enters airways.
12) ECOLOGICAL INFORMATION	
Ecotoxicity: Penconazole	
Birds:	Oral LD ₅₀ (8 d) Japanese quail: 2424 mg/kg. Mallard ducks: > 1590 mg/kg.
Fish:	LC ₅₀ (96 hours) Rainbow trout: 1.7-4.3 mg/l. Bluegill sunfish: 2.1-2.8 mg/l.
Daphnia:	LC ₅₀ (48 hours) 7-11 mg/l.
Algae:	EC ₅₀ (3 d) for <i>Pseudokirchneriella subcapitata</i> 1.7 mg/l.
Worms:	LC ₅₀ (14 d) for earthworms > 1000 mg/kg.
Bees:	LD ₅₀ (oral and topical) >5 µg/bee.
Persistence and Degradability:	Soil DT ₅₀ (aerobic, 20–25 °C, lab.) 61–188 d; (field) 67–107 d. Normalised K _{oc} (ads) 786–4120 ml/g. In aquatic systems, DT ₅₀ from water 2–3 d (sorption to sediment), from sediment 505 to >706 d. Insignificant hydrolytic and photolytic degradation in water.
Bio-accumulative Potential:	No evidence for accumulation.
Mobility in Soil:	Immobile in soil.
13) DISPOSAL CONSIDERATIONS	
Waste Disposal:	In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved chemicals waste disposal facility.
Container Disposal:	Refer to the product label for instructions. Container Refilling and Disposal: If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Do not transport if this container is damaged or leaking.
14) TRANSPORTATION INFORMATION	
Road Transport ADR / IRD:	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (penconazole) Transport Hazard Class: 9 Packaging group: III Labelling no: 9 Environmental Hazards: Not applicable Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.
Maritime Transport IMDG / IMO:	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (penconazole) Transport Hazard Class: 9 Packaging group: III Labelling no: 9 Environmental Hazards: Marine Pollutant Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.
	

Air Transport ICAO / IATA:	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (penconazole) Transport Hazard Class: 9 Packaging group: III Labelling no: 9 Environmental Hazards: Not applicable Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.
Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code):	No transport in bulk according to the IBC Code.
15) REGULATORY INFORMATION	
Safety, health and environmental regulations/legislation specific for the substance/mixture:	For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)
Chemical Safety Assessment:	Advice on product handling can be found in sections 7 and 8 of this safety data sheet.
16) OTHER INFORMATION	
<p>All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS 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.</p> <p>It is the responsibility of persons in receipt of this SDS 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 this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this SDS to their own SDS. The information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. A properly trained person using this product intends this document only as a guide to the appropriate handling of the material. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.</p> <p>MERIDIAN AGRITECH MAKES NO REPRESENTATION OR WARRANTIES, EITHER EXPRESSES OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANT ABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MERIDIAN AGRITECH (PTY) LTD WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.</p> <p>Date of issue: 04/10/2010 Date of revision: 28/04/2016, 25/01/2021</p> <p>Abbreviations and acronyms:</p> <ol style="list-style-type: none"> 1. CAS number: Chemical Abstracts Service number. 2. CLP: Classification, Labelling, Packaging. 3. LD₅₀: Lethal Dose for 50% of the test population. 4. LC₅₀: Lethal Concentration for 50% of the test population. 5. DT₅₀: Half-life. 6. GHS: Globally Harmonised System (of Classification and Labelling of Chemicals). 7. STOT: Specific Target Organ Toxicity 8. SE: Single exposure 9. RE: Repeated exposure 10. TWA: Time-weighted average. <p>Literature References:</p> <ul style="list-style-type: none"> • GHS: www.ccohs.ca/oshanswers/chemicals/ghs.html • ECHA: https://echa.europa.eu/search-chemicals 	