according to WHS Regulations

Printing date 16.08.2021 Revision: 16.08.2021

1 Identification

Product Name: GENFARM PENDIMETHALIN 440 EC HERBICIDE

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Agricultural herbicide

Details of Manufacturer or Importer:

Nutrien Ag Solutions Level 5, Building A 26 Talavera Road

Macquarie Park NSW 2113

Phone Number: (02) 9889 5400

Emergency telephone number: 1800 033 111

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.



Health hazard

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Acute Toxicity (Dermal) 4 H312 Harmful in contact with skin.

Skin Sensitisation 1 H317 May cause an allergic skin reaction.

Signal Word Danger

Hazard Statements

H312 Harmful in contact with skin.

H317 May cause an allergic skin reaction.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves / protective clothing.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P312 Call a POISON CENTER/doctor if you feel unwell.

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P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P391 Collect spillage. P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:			
CAS: 64742-94-5	Liquid hydrocarbon	50-60%	
	♦ Aspiration Hazard 1, H304		
CAS: 40487-42-1	Pendimethalin (ISO)	40-50%	
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sensitisation 1, H317		

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention.

Ingestion:

If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause mild respiratory irritation.

Skin Contact: May cause an allergic skin reaction. Harmful in contact with skin.

Eye Contact: May cause eye irritation.

Ingestion: Practically nontoxic by ingestion. May be fatal if swallowed and enters airways.

5 Fire Fighting Measures

Suitable Extinguishing Media: Foam, BCF, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and nitrogen and other pyrolysis products typical of burning organic material.

Product is not flammable, however it may burn in larger fire.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting entering drains or water courses.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

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6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure. Contaminated work clothing must not be allowed out of the workplace.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from heat, sparks, open flames and other sources of ignition. Keep away from oxidising agents, nitrates, oxidising acids, chlorine bleaches, pool chlorine, acids, acid chlorides, acid anhydrides, chloroformates, reducing agents, bases, ammonia and various metal oxides and metal salts. Avoid contact with moisture. Suitable containers are polyethylene or polypropylene.

8 Exposure Controls and Personal Protection

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Where an inhalation risk exists, mechanical extraction ventilation is recommended.

Respiratory Protection:

Use an approved type A vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation PVC gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate andpermeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

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Eve and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form: Liquid

Colour: Orange to yellow Odour: Solvent-like

Odour Threshold:

pH-Value:

Melting point/freezing point:
Initial Boiling Point/Boiling Range:
Flash Point:

No information available
No information available
No information available
No information available

Flammability: Product is not flammable, however it may burn in larger fire.

Auto-ignition Temperature: No information available Decomposition Temperature: No information available

Explosion Limits:

Lower:
Upper:
Vapour Pressure:
Relative Density:
Vapour Densit

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: Heat, sparks, open flames and other sources of ignition. Protect from moisture.

Incompatible Materials:

Oxidising agents, nitrates, oxidising acids, chlorine bleaches, pool chlorine, acids, acid chlorides, acid anhydrides, chloroformates, reducing agents, bases, ammonia and various metal oxides and metal salts.

Hazardous Decomposition Products:

Oxides of carbon and nitrogen and other pyrolysis products typical of burning organic material.

11 Toxicological Information

Toxicity:

LD50/LC50 Values Relevant for Classification:			
CAS: 64742-94-5 Liquid hydrocarbon			
Oral	LD50	5,000 mg/kg (rat)	
Dermal	LD50	2,000 mg/kg (rabbit)	
CAS: 40487-42-1 Pendimethalin (ISO)			
Oral	LD50	>5,000 mg/kg (rat)	
Dermal	LD50	>2,000 mg/kg (rat)	
Inhalation	LC50/4 h	>320 mg/l (rat)	

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Acute Health Effects

Inhalation: May cause mild respiratory irritation.

Skin: May cause an allergic skin reaction. Harmful in contact with skin.

Eye: May cause eye irritation.

Ingestion: Practically nontoxic by ingestion. May be fatal if swallowed and enters airways.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Chronic Health Effects:

Repeated or prolonged skin exposure may eczema, urticaria or Quincke's oedema. Prolonged or repeated exposure may cause changes to liver.

Existing Conditions Aggravated by Exposure: No data available.

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for pendimethalin for a human is 0.1 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 12.5 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2021).

12 Ecological Information

Ecotoxicity:

Aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

CAS: 6474	2-94-5 Liquid hydrocarbon
EC50/48 h	12 mg/l (daphnia)

EC50/72 h | 2.5 mg/l (skeletonema costatum)

LC50/96 h 45 mg/l (fathead minnow)

CAS: 40487-42-1 Pendimethalin (ISO)

LC50/96 h | 0.199 mg/l (bluegill)

0.138 mg/l (rainbow trout)

LC50/48 h | 0.28 mg/l (daphnia)

Persistence and Degradability: Pendimethalin is highly persistent in water and soil.

Bioaccumulative Potential: Pendimethalin has a high potential for bioaccumulation.

Mobility in Soil: Pendimethalin is moderately mobile.

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Other adverse effects: No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number

ADG, IMDG, IATA UN3082

Proper Shipping Name

ADG, IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (Pendimethalin (ISO))

Dangerous Goods Class

ADG Class: 9 Miscellaneous dangerous substances and articles.

Subsidiary Risk:

Packing Group:

ADG, IMDG, IATA Ш

Marine pollutant:

EMS Number: F-A,S-F •3Z

Hazchem Code:

Special Provisions: 274, 331, 335, 375, AU01

Transport/Additional information: Not subject to the ADG Code when transported in

Australia by Road or Rail in packages 500kg(L) or less;

or IBCs (refer to SP AU01)

Limited Quantities:

Packagings & IBCs - Packing Instruction: P001, IBC03, LP01

Packagings & IBCs - Special Packing Provisions: PP1 Portable Tanks & Bulk Containers - Instructions: T4

Portable Tanks & Bulk Containers - Special

Provisions: TP1, TP29

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All components are on the inventory, or in compliance with the inventory.

All ingredients are listed.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 5

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16 Other Information

Date of Preparation or Last Revision: 16.08.2021

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Dermal) 4: Acute toxicity - dermal – Category 4 Skin Sensitisation 1: Skin sensitisation, Hazard Category 1 Aspiration Hazard 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020"

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