



SAFETY DATA SHEET

PENDIMETHEX 330 EC HERBICIDE

Section 1: Identification of the Substance and Supplier

Product name: PENDINGMETHEX HERBICIDE
Chemical name of active Ingredient(s): Pendimethalin
Supplier: ADAMA New Zealand Limited
Level1/19 Elms Street, Wakatu Estate, Stoke, Nelson, New Zealand
P.O. Box 1799, Nelson New Zealand.
+64 3 543 8275 Fax: +64 3 543 8274
Telephone
Emergency Telephone: 0800 POISON (0800 764 766)

Section 2: Hazards Identification

Hazard Classifications: 3.1C, 6.1E, 6.3A, 6.9B, 8.3A, 9.1A, 9.2A
Most important hazards: TOXICITY
Warning –
May cause skin irritation.
Wash hands and exposed skin before meals and after work.
Harmful - May cause organ damage from repeated oral exposure at high doses.
DANGER – this product is corrosive and may cause eye damage.
Avoid skin contact.
FLAMMABILITY
Warning –
Flammable liquid and vapour. Keep away from sources of ignition..
ECOTOXICITY
Very toxic to aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container.
Very toxic to the soil environment.

Section 3. Composition/Information on Ingredients

Substance/preparation	Preparation				
Information on hazardous ingredients *					
Common name	CAS No.	%	EC Number	Symbol	R-Phrases
Pendimethalin	40487-42-1	33 w/v	-	XN,N	R10,22,43,65,66, R51/53
Solvent naphtha (petroleum)	64742-95-6	54 w/v			

- *Occupational Exposure Limit(s), if available, are listed in section 8*

Section 4: First-Aid Measures

First-aid measures: Remove victim from area of exposure. Wash off remaining material with plenty of water.
Inhalation: Remove victim to fresh air. If breathing is difficult: artificial respiration.
Get medical attention.
Ingestion: If swallowed do NOT induce vomiting. Wash mouth with water and get medical attention.
Skin contact: Gently blot away excess liquid. Wash gently and thoroughly with water (use non- abrasive soap if necessary) for 5 minutes or until chemical is removed.
Eye contact: Wash out with plenty of water with the eyelid held wide open for at least 15 minutes.
Get medical attention.

Section 5: Fire-Fighting Measures

Extinguishing media
Suitable: Dry chemical, water spray, foam, carbon dioxide.
Unusual fire/explosion hazards: Flashback may occur along vapour trail.
Hazardous thermal Carbon dioxide, carbon monoxide and smoke. Nitrogen and oxides of nitrogen.
(de)composition products: Occasionally hydrogen cyanide gas.



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Protection of fire fighters: Self-contained breathing apparatus and total protection required in enclosed areas.

Section 6: Accidental Release Measures

Personal precautions: Wear suitable protective clothing.
Environmental precautions: Do not discharge into drains or the environment.
Methods for cleaning up: Keep away from: open flame, sparks and heat. Absorb remainder in sand or other inert material. Dispose of in an authorised waste collecting point.

Section 7: Handling and Storage

Handling: Keep out of reach of children. Do not eat, drink or smoke while using. Keep away from: sparks, open flame and direct sunlight.
When mixing or applying wear appropriate clothing including cotton overalls buttoned to the neck and wrist, impervious, elbow-length gloves and eye protection.

Storage: Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs. As a Class 9 Substance with Ecotoxicity Classifications, storage of Pendimethex Herbicide must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS 8409:2004) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations.
Incompatible with acids, bases, oxidising agents.

Section 8: Exposure Controls/Personal Protection

Engineering measures: Ventilation required.
Hygiene measures: When handling do not eat, drink or smoke. Wash hands thoroughly after handling.
Wash clothing separately before re-use.

Occupational Exposure Limits

Common name: Pendimethalin Not Established

Personal protective equipment:

Respiratory system: Respiratory protection is not required if good ventilation is maintained.
Skin and body: Wear suitable protective clothing. Chemical resistant boots.
Hands: Chemical resistant gloves.
Eyes: Safety goggles or face shield.

Section 9: Physical and Chemical Properties

Physical state: Liquid
Colour: Brown-orange
Odour: Aromatic hydrocarbon
Boiling point: 155-181°C at 100kPa
Vapour Density: No data
Vapour pressure: 4.0 mPa @ 25°C (Pendimethalin)
Water Solubility: Emulsifiable
Octanol/water partition No data
Flammability: Flammable
Flash Point: 45°C
Lower explosion limit: 1 %
Upper explosion limit: 7 % (solvent)
Oxidation properties: Keep away from strong oxidizing agents



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Section 10: Stability and Reactivity

Stability:	Not subject to polymerization.
Materials to avoid:	Keep away from sources of sparks or ignition. Any electrical equipment in area of this product should be flame proofed.
Incompatibilities:	Oxidizing agents, acids, bases.
Hazardous decomposition Products:	Carbon dioxide, carbon monoxide and smoke. Nitrogen and its compounds. Occasionally hydrogen cyanide gas.

Section 11: Toxicological Information

Preparation	
Common name:	Pendimethalin
Chronic toxicity:	No effects - 40mg/kg/day 90 day feed (rats)
Reproduction effects:	No effects were observed at 30mg/kg/day (rats)
Carcinogenicity:	Not carcinogenic
Mutagenicity:	Not mutagenic
Teratogenicity:	Not teratogenic

Section 12: Ecological Information

Common name:	Pendimethalin
Birds	Mallard duck LD ₅₀ = 1421 mg/kg Mallard duck LC ₅₀ = > 10,900 mg/kg Bobwhite quail LC ₅₀ (8 day feeding) = 3149 mg/kg
Fish	Bluegill sunfish LC ₅₀ = 199 µg/L (96h) Rainbow trout LC ₅₀ = 138 µg/L (96h) Daphnia magna LC ₅₀ = 280 µg/L (48h)
	Highly toxic: Fish and aquatic invertebrates Toxic to aquatic organisms. Slightly toxic: birds, Non toxic: Bees

Environmental Fate:

Breakdown in soil and groundwater: Pendimethalin is moderately persistent, with a field half-life of approx 40 days. It does not undergo rapid microbial degradation except under anaerobic conditions. Slight losses of Pendimethalin can result in photodecomposition and volatilization. Pendimethalin is strongly adsorbed by most soils. Increasing soil organic matter and clay is associated with increased soil binding capacity. It is practically insoluble in water, and thus will not leach appreciably in most soils, and should present a minimal risk of ground water contamination.

Breakdown in water: Pendimethalin is stable to hydrolysis, but may be degraded by sunlight in aquatic systems. Pendimethalin may also be removed from the water column by binding to suspended sediment and organic matter. It is rapidly degraded under anaerobic conditions once precipitated to sediment.

Breakdown in vegetation: plant roots and shoots, absorb Pendimethalin, and inhibits cell division and cell elongation. Once absorbed into plant tissues, translocation is limited and Pendimethalin breaks down via oxidation. The leaves of grasses do not absorb Pendimethalin, and plants take up only very small amounts from the soil. Residues on crops at harvest are usually below detectable levels (0.5 ppm).

Section 13: Disposal Considerations

Methods of disposal:	Container Disposal - Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle. Avoid contamination of any water supply with product or empty container.
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Section 14: Transport Information

UN Number	1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
DG Class	3
Packing Group	III
Hazchem Code	3[Y]
Marine Pollutant	Yes
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National transport regulations: Do not carry this product on a passenger service vehicle.

Segregation: Check the land transport Rule Dangerous Goods 1999, Rule 45001 for additional information. Sea transport may require additional segregation. Refer: NZS5433; Sea Segregation, or the International Maritime Dangerous Goods Code for details.

Section 15: Regulatory Information

New Zealand Regulatory Information:

NZFSA Approval: Registered pursuant to the ACVM Act 1997. No P7364
See www.nzfsa.govt.nz/acvm for registration conditions.

Approval pursuant to the HSNO Act 1996, Approval No. HSR000550
See www.ermanz.govt.nz for registration conditions.

HSNO Classifications: 3.1C, 6.1E, 6.3A, 6.9B, 8.3A, 9.1A, 9.2A



FLAMMABLE LIQUID



CORROSIVE



ECOTOXIC

APPROVED HANDLER - this product must be under the care of an approved handler when it is applied in a wide dispersive manner or used by a commercial contractor

RECORD KEEPING -Records of use must be kept under certain circumstances – see The New Zealand Standard for the Management of Agrichemicals (NZS 8409) for details.

Section 16: Other Information

Note: This product is a registered agricultural chemical and must be therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

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HISTORY

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