SAFETY DATA SHEET
ALANEX 480 EC Herbicide

Section 1: Identification of the Substance and Supplier

Product name :	**ALANEX 480 EC**
Chemical name of active Ingredient(s):	2-Chloro-2',6'-diethyl-N-(methoxymethyl) acetanilide
Supplier:	ADAMA New Zealand Limited Level1/19 Elms Street, Wakatu Estate, Stoke, Nelson, New Zealand P.O. Box 1799, Nelson New Zealand.
Telephone	+64 3 543 8275 Fax: +64 3 543 8274

Emergency Telephone: 0800 POISON (0800 764 766)

Section 2: Hazards identification

Hazard Classifications: 3.1C, 6.1D, 6.3B, 6.4A, 6.5B, 6.7B, 6.9A, 9.1A, 9.2A, 9.3C

Most important hazards: Flammable liquid – keep away from naked flame.
Toxicity- May be harmful if swallowed, inhaled or absorbed through the skin. May cause eye and mild skin irritation. May cause sensitization from prolonged skin contact. Suspected of causing cancer.
Danger -Presumed to cause organ damage from repeated oral exposure at high doses. Avoid skin and eye contact and inhalation of vapour and spray mist.
Very toxic to aquatic organisms and 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
Alachlor (ISO)	15972-60-8	41-45	240-110-8	Xn, N	R22-40-43 50/53
Chlorobenzene	108-90-7	39-43	203-628-5	Xn,N	R10-20-51/53

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

Section 4: First-Aid Measures

Effects and symptoms:

Inhalation:	Vapours – headaches, dizziness and nausea
Ingestion:	Nausea, headaches, cramps, vomiting.
Skin contact:	Irritating to skin. May cause sensitisation by skin contact.
Eye contact:	Irritating to eyes.

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:	Wash out mouth with plenty of water. Get medical attention. Never give anything by mouth to an unconscious person.
Skin contact:	Remove contaminated clothing. Wash away remainder with water and soap.
Eye contact:	Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Get medical attention.

Notes to a physician: There is no specific antidote. Treat symptomatically and give supportive therapy.

Protection of first-aiders: Use appropriate protection (see section 8).

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 (de)composition products: Chloride compounds and nitrogen oxides
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: Avoid contact with skin and eyes. Ventilation required. Keep away from: sparks, open flame and direct sunlight.
Storage: Keep only in the original container. Keep in a cool, dry, well ventilated place away from direct sunlight.

Packaging materials suitable: Resin-lined metal drums

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: **Alachlor (ISO)**
TVL (USA) 5 mg/m^3

Common name: **Chlorobenzene**
TVL (USA): 10 ppm
"MAK (Germany): 50 ppm

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: Violet
Odour: Aromatic (solvent)
Boiling point: 130^{o}C (Chlorobenzene)
Density: 1.12 ± 0.01 g/ml @ 20^{o}C
Vapour pressure: 2.9 mPa @ 25^{o}C (Alachlor) (ISO)
Solubility in water: 242 ppm @ 25 ^{o}C (Alachlor) (ISO)

Octanol/water partition coefficient	log = 2.9 (Alachlor) (ISO)
pH:	5-7 CIPAC, MT 75
Flash point:	29 °C (closed cup)
Flammability:	Flammable
Autoignition temperature:	>600 °C (Chlorobenzene)
Explosion properties:	Vapours (Naphta) – May form explosive mixture with air.
Lower Explosion Limit:	1.3 volume %
Upper Explosion limit:	11 volume %
Oxidation properties:	Keep away from: Strong oxidizing agents.

Section 10: Stability and Reactivity

Stability:	Not subject to polymerization.
Materials to avoid:	Oxidizing agents, acids and alkali.
Hazardous reactions :	None
Hazardous decomposition products:	Chloride compounds and nitrogen oxides.

Section 11. Toxicological Information

Acute toxicity - Oral:	LD_{50} (rat)= 1,837 mg/kg
Acute toxicity - Dermal:	LD_{50} (rabbit) > 2,000 mg/kg
Acute toxicity – Inhalation:	LC_{50} (rat) > 5.05 mg/L (4 hours) (maximum attainable concentration)
Skin irritation:	Severely irritating (rabbit).
Eye irritation:	Severely irritating (rabbit).
Common name:	**Alachlor (ISO)**
Chronic toxicity:	NOEL: mice 26 mg/kg/day; 0.5 mg/kg/day
Carcinogenicity:	EPA : Group B2 EU : Carc. Category 3 IARC : Not classified
Mutagenicity:	Not mutagenic
Reproduction toxicity:	NOEL 30 mg/kg/day (3-generation)
Other information :	Teratogenicity - NOEL (Maternal and Fetal): 60 mg/kg/day

Section 12: Ecological Information

Common name:	**Alachlor (ISO)**
Mobility:	Soil – Low mobility – moderately mobile Adsorbed on soils with high organic content. **Water** Low risk of underground water contamination.
Persistence/degradability:	**Soil** Half-life time (t½): ˜ 21 days Degradation is primarily via: microorganisms. **Water** 55% degraded in 28 days
Bioaccumulative potential:	Low bioaccumulation potential (K_{ow} log P = 3.09)
Ecotoxicity:	**Fish** LC_{50} (96 hours) rainbow trout (oncorhynchus mykiss) = 2.8 mg/L Bluegill sunfish (Lepomis macrochirus) = 1.8 mg/L Dwarf gowrami = 1.73 mg/L **Daphnia magna** EC_{50} (24 hours) = 26 mg/L **Algae** (seleastrum capriconutun) EC_{50} (72 hours) = 0.012 mg/L **Birds** Bobwhite quail (colinus virginianus) LD_{50} = 1,536 mg/kg

Chicken	LD_{50} = 916 mg/kg
Mallard duck (anas platyrhynchos) and Bobwhite quail (colinus virginianus):	LC_{50} > 5,620 mg/kg (5 feeding days)

Bees
LD_{50} = 32 mg/bee
Very toxic to aquatic organisms. Low toxicity: birds, Non toxic: Bees

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.

Section 14: Transport Information

UN Number	1993
Proper shipping name	FLAMMABLE LIQUID N.O.S. (chlorobenzene)
DG Class	3
Packing Group	III
Hazchem Code	3[Y]
Marine Pollutant	Yes
IER Guide page	14
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 P7246
See www.nzfsa.govt.nz/acvm for registration conditions.

Approved pursuant to the HSNO Act 1996, Approval No. HSR000397
See www.ermanz.govt.nz for registration conditions.

HSNO Classifications: 3.1C 6.1D, 6.3B, 6.4A, 6.5B, 6.7B, 6.9A, 9.1A, 9.2A, 9.3C

3.1C
Flammable Liquid

9.1A, 9.2A
Ecotoxic

APPROVED HANDLER - 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 Standards for Management of Agrichemicals (NZS8409) for details.

Section 16: Other Information

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.

HISTORY

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