



SAFETY DATA SHEET PYRINEX 480 EC Insecticide

Section 1: Identification of the Substance and Supplier

Product name: PYRINEX 480 EC
Chemical name of active Ingredient(s): Chlorpyrifos: C9H11C13NO3PS
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, 6.1C, 6.3A, 6.4A, 6.8B, 6.9A, 9.1A, 9.2B, 9.3.A, 9.4A

Most important hazards: **FLAMMABLE**
Warning – flammable liquid – keep away from naked flame
TOXICITY
Warning -
May be fatal if swallowed, inhaled or absorbed through the skin.
May cause eye and skin irritation.
May cause reproductive/development damage from repeated oral exposure.
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.
ECOTOXICITY
Very toxic to aquatic organisms. Avoid contamination of any water supply with product or empty container.
Very toxic in the soil environment.
Very toxic to terrestrial invertebrates
Toxic to bees. Spray must not contact plants in flower if they are likely to be visited by bees.

Section 3. Composition/Information on Ingredients

Substance/preparation	Preparation				
<u>Information on hazardous ingredients *</u>	<u>CAS No.</u>	<u>%</u>	<u>EC Number</u>	<u>Symbol</u>	<u>R-Phrases</u>
Chlorpyrifos (ISO)	002921-88-2	480g/L	220-864-4	Xn, N	R24/25, R50-53
Solvent naphtha (petroleum) light aromatic contains less than 0,1% w/w benzene	1330-20-7	ca 45	64742-95-6	Xn	R10-20/21-38
CaABS/n-Butanol		ca 4	-----	Xi	R10,38-41,67

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

Section 4: First-Aid Measures

Eye contact: Redness, tears

First-aid measures: Remove victim from area of exposure. Wash off remaining material with plenty of water.



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Inhalation:	Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult: give oxygen. If not breathing, give artificial respiration. Get medical attention.
Ingestion:	Do not induce vomiting. Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
Skin contact:	Remove contaminated clothing. Wash away remainder with water and Soap. Followed by a warm water rinse. Obtain medical attention.
Eye contact:	Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Consult eye specialist immediately.
Notes to a physician:	Antidote 1: Atropine sulfate Antidote 2: Obidoxime chloride or Pralidoxime (PAM) Suggest serum and/or RBC cholinesterase determination. If ingested perform gastric lavage and administer activated charcoal.
Protection of first-aiders:	Use appropriate protection (see section 8).

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable:

For small fire: Dry chemical, carbon dioxide.
For Large fire water spray, alcohol resistant foam

Hazardous thermal

(de)composition products:

Thermal decomposition generates: carbon monoxide, carbon dioxide, hydrogen chloride, sulfur oxide, nitrogen oxides, phosphorus oxides, chlorides sulfide

Protection of fire-fighters:

Self-contained breathing apparatus and total protection required

Section 6: Accidental Release Measures

Personal precautions:

Wear suitable protective clothing. (see section 8) During cleaning activity, shut off ignition sources.

Environmental precautions:

Do not discharge into drains or the environment. If this product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out.

Methods for cleaning up:

Minor spillage: Absorb in sand or other inert material. Use appropriate container to avoid environmental contamination.

Major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

Section 7: Handling and Storage

Handling:

Do not breathe fumes. Avoid contact with skin and eyes.

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 Pyrinex Insecticide 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 (NZS8409) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations.

Packaging materials suitable:

Multi-layer high density polyethylene extrusion blow containers.
Drums with polyethylene liner.

Section 8: Exposure Controls/Personal Protection

Engineering measures:

Ventilation required.



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Hygiene measures:	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use.
Occupational Exposure Limits:	
TVL-TWA [mg/m³]	(USA) Chlorpyrifos: 0.2, A4 skin (1999) (USA) Xylene: 434, A4 (1996)
Personal protective equipment:	
Respiratory system:	During spraying wear suitable respiratory equipment.
Skin and body:	Wear suitable protective clothing.
Hands:	Chemical resistant gloves.
Eyes:	Safety goggles or Chemical goggles.

Section 9: Physical and Chemical Properties

Physical state:	Liquid
Colour:	Off white (clear)
Odour:	Faint odour
Specific gravity:	1.06-1.08
Molecular weight:	Chlorpyrifos: 350.62
Melting point:	Chlorpyrifos: 41.5 -43.5 °C (pure)
Decomposition point:	Above 160°C (pure)
Vapour pressure mm/Hg:	Chlorpyrifos: 2.4 x (10) ⁻⁵ (25 °C, pure)
Solubility in water:	Emulsifiable
Flash Point:	46°C
Partition coefficient: n-octanol/ water	4.76 (25 °C) Chlorpyrifos
Auto-ignition temperature:	474 °C
Decomposition temperature:	Chlorpyrifos: Above 160 (pure)
Viscosity:	2.58mm ² /sec (40 °C)
Explosive Properties:	Not available
Oxidizing Properties:	Not available
Surface tension mN/m:	27.3

Section 10: Stability and Reactivity

Physico-chemical Stability:	Stable under normal conditions
Conditions to avoid:	Protect from (sun) light and excessive heat. Temperature exceeding: 75°C
Hazardous reactions :	Avoid contact with: strong oxidizing agents, strong acids, strong bases.
Hazardous Polymerization:	Will not occur
Hazardous decomposition Products:	Thermal decomposition generates: carbon monoxide, carbon dioxide, hydrogen chloride, sulfur oxide, nitrogen oxides, phosphorus oxides, chlorides, sulfides.

Section 11. Toxicological Information

Preparation	Chlorpyrifos
Acute toxicity - Oral:	LD ₅₀ (rat)= 508 mg/kg
Acute toxicity - Dermal:	LD ₅₀ (rabbit) > 2,000 mg/kg
Acute toxicity – Inhalation:	LC ₅₀ (rat) > 3.3mg/L
Skin irritation:	Irritating to skin (rabbit).
Eye irritation:	Irritating to eyes (rabbit).
Sensitization :	Guinea-pig maximization test: Sensitizer
Common name:	Chlorpyrifos
Carcinogenicity:	Not carcinogenic
Mutagenicity:	Not mutagenic
Reproduction toxicity:	Not teratogenic in animal experiments



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Section 12: Ecological Information

Common name:	Chlorpyrifos
Ecological effects information	No ecological information is known on the product.
96 H-LC ₅₀ – Rainbow trout [µg/l]	7.1
48 H-LC ₅₀ – Daphnia magna [µg/l]	.01 (MCW)
	1.7 (pesticide manual)
NOEC – Algae [mg/l]	>0.4 (selenastrum capricornutum) (Pesticide manual)
LD ₅₀ Birds [mg/l]	476
Bees LD50 [µg/Bee]	Toxic to bees
Persistence and degradability:	Half life time (t _{1/2}) 80-279 days (soil)
Mobility:	Not mobile
Bioaccumulative potential:	Chlorpyrifos does not bioaccumulate in aquatic organisms, Biodegraded by microorganisms

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	3017
Proper shipping name	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE (480G/L CHLORPYRIFOS)
DG Class	6.1
Subsidiary Risk Class	3
Packing Group	III
Hazchem Code	2X
Marine Pollutant	Yes
IER Guide page	16

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 P7273
See www.nzfsa.govt.nz/acvm for registration conditions.

Approved pursuant to the HSNO Act 1996, Approval No. HSR000225
See www.ermanz.govt.nz for registration conditions.

HSNO Classifications: 3.1C, 6.1C, 6.3A, 6.4A, 6.8B, 6.9A, 9.1A, 9.2B, 9.3.A, 9.4A



ACUTE TOXIC



FLAMMABLE LIQUID



ECOTOXIC



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APPROVED HANDLER: This product must be under the control of an approved handler during use

RECORD KEEPING - Records of use must be kept under certain circumstances – see The New Zealand Standards for Management of Agrichemicals (NZS8409) for details.

TRACKING: this product must be tracked – see SDS 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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