

OUTPERFORM 500

Section 1: Identification

Product name:	Outperform 500
Other names:	500 g/litre Chlorpyrifos as an emulsifiable concentrate.
Recommended use:	For control of various insect pests in certain agricultural and horticultural crops.
Manufacturer/Importer details:	AgStar New Zealand Pty Ltd 4 Putakitaki Street, Lincoln, Christchurch 7608
Distributor:	Farmlands Co-operative Society Limited 535 Wairakei Road, Burnside, Christchurch 8053 TEL 0800 200 600
24 hour emergency contact:	0800 CHEMCALL (0800 243622)
National Poisons Centre:	0800 POISON (0800 764766)

Section 2: Hazard identification

HSNO Approval: Hazardous classification:	Product is classified as hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020 of the HSNO Act, 1996. HSR000224 Flammable liquid Category 4, Acute oral toxicity Category 3, Acute dermal toxicity Category 3, Acute inhalation toxicity Category 4, Aspiration hazard Category 1, Eye irritation Category 2, Reproductive toxicity Category 2, Specific target organ toxicity (repeated) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to terrestrial invertebrates, Hazardous to aquatic environment (acute) Category 1, Hazardous to the aquatic environment (chronic) Category 1.
Pictograms:	  
Signal word:	DANGER
Hazard statements:	H227 Combustible liquid. H301 Toxic if swallowed. H311 Toxic in contact with skin. H332 Harmful in inhaled. H304 May be fatal if swallowed and enters airways. H319 Cause serious eye irritation. H361 Suspected of damaging fertility or the unborn child. H372 Causes damage to organs H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long-lasting effects. Toxic to the soil terrestrial invertebrates. Very toxic to terrestrial vertebrates.

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Prevention statements:	P102 Keep out of reach or children. P103 Read label before use. P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P264 Wash hands thoroughly after handling P270 Do not eat, drink or smoke when using this product P271 Use only outdoors or in a well ventilated area P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection P260 Do not breathe dust/fume/gas/mist/vapours/spray
Response statements:	P101 If medical advice is needed, have product container or label at hand. P370+P378 In case of fire use water spray, foam, dry chemical or CO2 to extinguish P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. P331 Do NOT induce vomiting P321 Specific treatment (Refer section 4) P330 Rinse mouth P302+P352 IF ON SKIN: Wash with plenty of water P315 Get emergency medical advice/attention P361+P364 Take off immediately all contaminated clothing and wash it before reuse P304+P340 IF INHALED: Move person to fresh air and keep comfortable for breathing P317 Get medical help P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing P337+P317 If eye irritation persists: Get medical help P314 Get medical advice/attention if you feel unwell P391 Collect spillage
Storage statements:	-
Disposal statement:	P501 Dispose of product and containers in accordance with local Regulations. See Section 13 for details.
Additional Label Requirements:	Do not apply into or onto water. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Section 3: Composition/information on ingredients

Chemical identity of ingredients with health or environmental hazards:

<i>Ingredient</i>	<i>CAS No.</i>	<i>Proportion</i>
Chlorpyrifos	2921-88-2	495 - 505 g/L
Other ingredients	Proprietary	To 100%

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Section 4: First-aid measures

First aid measures:	If medical advice is needed, have product container or label at hand. For advice contact National Poisons Centre 0800 POISON [0800 764 766] or a doctor.
Ingestion:	Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTRE or doctor for advice. If person vomits spontaneously, ensure head is below hips to prevent aspiration into lungs.
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell.
Skin contact:	Immediately remove all contaminated clothing. Wash with plenty of soap and water. Call a POISON CENTRE or doctor if you feel unwell. Wash contaminated clothing before reuse.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical attention.
First aid facilities:	Provide eye baths and safety showers close to areas where product contact or splashing may occur.
Advice to doctor:	Treat symptomatically.

Section 5: Fire-fighting measures

Flammability:	Combustible liquid
Appropriate extinguishing media:	Water spray, foam, dry powder, carbon dioxide. Avoid water jet.
Hazardous decomposition products:	During a fire, toxic fumes may be emitted. Wear self-contained breathing apparatus. Contain runoff.
Special protective equipment and precautions for fire-fighters:	In the event of fire, wear self-contained breathing apparatus. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Prevent run-off from contaminating drains, sewers or waterways. Inform appropriate authorities immediately if product or run-off enters waterways.
HAZCHEM code:	2X

Section 6: Accidental release measures

Personal precautions:	Avoid contact with skin, eyes and inhalation of spray mist. When mixing and applying wear full protective clothing such as impervious gloves, eye protection, respirator, waterproof hat, coat and trousers (worn outside rubber boots).
Environmental precautions:	Contain and collect spillage. Prevent chemical contaminating drains or watercourses by activating emergency shut-off valves or using bunding. Inform appropriate authorities immediately if spill enters waterways or sewers. Prevent chemical contaminating soil.
Procedure for clean up:	Collect spill and absorb residues with inert absorbent material such as sand, soil or clay granules. Collect into an appropriate, labelled, waste container and dispose of at an approved facility. Prevent runoff entering waterways or contaminating the soil.

Section 7: Handling and storage

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Safe handling:	Read label before use. Use only outdoors or in a well-ventilated area. Wear protective clothing; chemical goggles or a face shield, impervious gloves, overalls and boots when handling.. Wash splashes from skin immediately. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash contaminated clothing before re-use.
Safe storage:	MUST BE SECURED IF LEFT UNATTENDED. Store locked up in the original tightly closed container in a well-ventilated place. Store in accordance with the current version of NZS 8409 Management of Agrichemicals. Keep cool. In case of fire use water fog or fine spray for extinction. There are requirements when storing this product in a workplace, relating to labelling, safety data sheets, stationary container systems, separation distances, secondary containment, emergency response plans, and signage; and in a place other than a workplace, relating to stationary container systems, separation distances, emergency response plans, secondary containment, and signage. Secondary containment and emergency response plans are required where 100 L or more of this product are stored. Refer to the product SDS for further information. Do not store with Class 1, 2, 3.2, 4 or 5 substances or foodstuffs. Stores containing more than 500 L of Outperform 500 require two fire extinguishers.

Section 8: Exposure controls/personal protection

Occupational exposure limits:	<table><tr><th><i>Ingredient</i></th><th><i>CAS No.</i></th><th><i>WES-TWA</i></th><th><i>WES-STEL</i></th></tr><tr><td>Chlorpyrifos</td><td>2921-88-2</td><td>0.2 mg/m³</td><td>-</td></tr></table>	<i>Ingredient</i>	<i>CAS No.</i>	<i>WES-TWA</i>	<i>WES-STEL</i>	Chlorpyrifos	2921-88-2	0.2 mg/m ³	-
<i>Ingredient</i>	<i>CAS No.</i>	<i>WES-TWA</i>	<i>WES-STEL</i>						
Chlorpyrifos	2921-88-2	0.2 mg/m ³	-						
Biological limit value:	None set as of WorkSafe's 14 th edition of WES and BEI values, published November 2023.								
Engineering controls:	Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below the exposure limits.								
Respiratory protection:	Wear half or full mask fitted with vapour filter when mixing or applying spray.								
Hand protection:	Elbow length, chemical resistant gloves (e.g. PVC, rubber, neoprene or nitrile).								
Eye protection:	Goggles with side pieces or a face shield.								
Skin protection:	Overalls and PVC or rubber boots.								
General hygiene:	Do not eat, drink or smoke while using. Wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing daily after work.								
Personal Protection:	Further information on specific types of personal protective gear and related standards is available in Section 16.								

Section 9: Physical and chemical properties

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(a)	Appearance:	Yellow transparent liquid
(b)	Odour:	Non-specific
(c)	Odour threshold:	Not available.
(d)	pH:	4.5 – 6.5.
(e)	Melting point/freezing point:	Not available.
(f)	Initial boiling point and boiling range:	Not available
(g)	Flash point:	No data available
(h)	Flammability (solid, gas):	Not applicable.
(i)	Upper/lower flammability or explosive limits:	Not available.
(j)	Vapour pressure:	No data available.
(k)	Vapour density:	No data available.
(l)	Relative density:	No data available.
(m)	Solubility:	Emulsification in water.
(n)	Partition coefficient: n-octanol/water:	Not available.
(o)	Auto-ignition temperature:	Not available.
(p)	Decomposition temperature:	Not available.
(q)	Kinematic viscosity:	Not available.
(r)	Particle characteristics	Not applicable.

Section 10: Stability and reactivity

Stability of the substance:	Stable under normal conditions of storage and use.
Conditions to avoid:	Avoid direct sunlight; avoid generation of dust and excessive heat.
Incompatible materials:	Incompatible with strong alkalis or oxidising materials.
Hazardous decomposition products:	Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Hydrogen chloride and toxic oxides of nitrogen are released when the product decomposes on heating.

Section 11: Toxicological information

	Toxicity classifications determined by assessment of the components in the formulated mixture.
a) Acute toxicity:	Toxic if swallowed or in contact with skin.
b) Aspiration hazard:	May be fatal if swallowed and enters airways.
c) Respiratory irritation:	Harmful if inhaled.
d) Skin corrosion / irritation:	Toxic in contact with skin.
e) Serious eye damage / irritation:	Cause serious eye irritation
f) Respiratory or skin	

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sensitisation:	Not classified.
g) Germ cell	
mutagenicity:	Not classified.
h) Carcinogenicity:	Not classified.
i) Reproductive toxicity:	Suspected of damaging fertility or the unborn child
j) Specific organ toxicity:	Cause damage to organs through prolonged or repeated exposure.
k) Narcotic effects:	Not classified.
l) Other adverse effects:	No information.
m) Toxicological information for Chlorpyrifos:	Acute Oral LD50 (rat) 96 mg/kg bw (rat) Acute Dermal LD50 120mg/kg (mouse) Acute Inhalation: LC50 (rat) >1mg/L air

Section 12: Ecological information

	Ecotoxicological classifications determined by assessment of the active ingredient.
(a) Aquatic ecotoxicity:	Very toxic to aquatic life with long-lasting effects (chronic).
(b) Soil ecotoxicity:	Toxic to the soil environment.
(c) Terrestrial vertebrate ecotoxicity:	Very toxic to terrestrial vertebrates.
(d) Terrestrial invertebrate ecotoxicity:	Very toxic to terrestrial invertebrates.
(e) Persistence and degradability:	DT50 (Typical) 386 days.
(f) Potential to be bioaccumulative:	Octanol-water partition coefficient LogP = 4.7 (high)
(g) Mobility in soil.	Soil organic carbon water partitioning coefficient Koc = 5509(non mobile)
(h) Ecotoxicological information for active ingredient Chlorpyrifos:	Acute Oral LD50 (Chicken) 32 mg/kg LC50 (96 hr) (Rainbow Trout) 0.007 mg/l EC50 (48 hr) (Daphnia) 1.7µg/l EC50 (72 hr) (Algae) 0.48 mg/l Acute Oral LD50 (Bee) 0.36 µg/bee

Section 13: Disposal considerations

Product disposal:	Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.
Container disposal:	Triple rinse empty container and add rinsate to spray tank. Submit clean empty container to an agrichemical recycler. Alternatively, burn in an appropriate incinerator if circumstances such as wind direction permit, or puncture and bury in a suitable landfill. Avoid contamination of any water supply with product or empty container.

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Section 14: Transport information

UN number: 3018
UN proper shipping name: ORGANOPHOSPHORUS LIQUID, TOXIC (CHLORPYRIFOS 50%)
UN class: 6.1
Packing group: III
HAZCHEM: 2X
Marine pollutant: No
Special precautions: -

This product is classified as a Dangerous Good Class 6.1.
Consult the Land Transport Rule: Dangerous Goods 2005 and NZS 5433:2020 Transport of Dangerous Goods on Land for more information.

Section 15: Regulatory information

HSNO: Approved substance under the HSNO Act 1996.
Substance approval number: HSR000224
Tolerable exposure limit / environmental exposure limit: No limits set.
HSNO controls: See www.epa.govt.nz

Qualifications	Yes
Tracking:	No
Safety Data Sheet:	Any quantity
Restricted to workplace only:	Yes
Quantity that must be secured when unattended:	-
Fire extinguishers	-
Quantity for secondary containment and emergency response plan:	100 L
Quantity for signage:	100 L
Quantity for Location certificate	-
Records of use (3 kg or more applied to area within 24 hours)	Yes
Quantity that requires management in accordance with HSW HS Regulations Hazardous Substances (Packaging) Notice 2017; Clause 9	UN Pack Group III

Additional controls: -

Additional information: Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.
Refer to WorkSafe for additional information on controls in the workplace; www.worksafe.govt.nz.

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ACVM:	Registered under the Agricultural Compounds Veterinary Medicines Act 1997.
Registration number:	P10220
Conditions of registration:	See www.foodsafety.govt.nz

Section 16: Other information

Date of issue:	03/09/2025
Reason for reissue:	Updated label
Replaces:	Not applicable
Information references:	Supplier Safety Data Sheet NZ EPA Approved hazardous substances databases. Workplace Exposure Standards and Biological Exposure Indices
Abbreviations:	ACVM: Agricultural Chemicals and Veterinary Medicines Group Bw: Bodyweight. HSNO: Hazardous substances and New Organisms Act 1996 (HSNO Act) EPA: Environmental Protection Authority of New Zealand CAS Number: Chemical Abstracts Service Number LD50: Lethal Dose 50% (Population) LC50: Lethal Concentration 50% (Population) WES-TWA: Workplace exposure standards – Time-weighted average WES-STEL: Workplace exposure standards – Short-term exposure limit
Personal Protection Standards:	The following Standards provide general advice regarding safety clothing and equipment: Respiratory equipment: AS/NZS 1715 , Protective Gloves: AS 2161 , Occupational Protective Clothing: AS/NZS 4501 , Industrial Eye Protection: AS1336 and AS/NZS 1337 , Occupational Protective Footwear: AS/NZS2210

The data provided in this safety data sheet is based on current knowledge and experience. The purpose of this document is to describe the product in terms of its safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.