

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: YATES NATURES WAY PYRETHRUM

Recommended Use: Natural insecticide for the control of aphids, whitefly, mealy bug, caterpillars, earwigs, pear slug and passion vine hopper.

Supplier: Yates New Zealand, a division of DuluxGroup (New Zealand) Pty Ltd
ABN 55 133 404 118
Co. 2355191

Street Address: The Gate Industrial Park,
373 Neilson St, Onehunga
Auckland, New Zealand

Telephone Number: +64 9 636 2800

Facsimile: +64 9 636 2802

Emergency Telephone: CHEMCALL 0800 243 622 (ALL HOURS)

2. HAZARDS IDENTIFICATION

Classified as a Dangerous Good according to NZS 5433:2007 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

Subclasses:

Subclass 3.1 Category D (low hazard) - Flammable Liquids.
Subclass 6.3 Category B - Substances that are mildly irritating to the skin.
Subclass 6.4 Category A - Substances that are irritating to the eye.
Subclass 6.5 Category A - Substances that are respiratory sensitisers.
Subclass 6.5 Category B - Substances that are contact sensitisers.
Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.
Subclass 9.1 Category A - Substances that are very ecotoxic in the aquatic environment.
Subclass 9.4 Category A - Substances that are very ecotoxic to terrestrial invertebrates.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Risk Phrases
Polyethylene glycol	25322-68-3	to 100%	-
Pyrethrins (pyrethrum)	8003-34-7	14 g/L	R20/21/22 R50/53
Emulsifier	-	10-<30%	-
Piperonyl butoxide	51-03-6	56.5 g/L	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

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Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:

If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

Medical attention and special treatment:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazards from combustion products:

Combustible liquid. On burning will emit toxic fumes, including those of oxides of carbon .

Precautions for fire fighters and special protective equipment:

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Hazchem Code: 2X

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:

If contamination of sewers or waterways has occurred advise local emergency services.

Methods and materials for containment and clean up:

Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers.

7. HANDLING AND STORAGE

Precautions for safe handling: Keep out of reach of children. Avoid skin and eye contact and breathing in vapour, mists and aerosols.

Conditions for safe storage: Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Store away from sources of heat or ignition. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH). However, Workplace Exposure Standard(s) for constituent(s):

Pyrethrum: WES-TWA 5 mg/m³, sen

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As published by the New Zealand Occupational Safety and Health Service (OSH).

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

'Sen' Notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering controls:

Natural ventilation should be adequate under normal use conditions.

Personal Protective Equipment:

Avoid contact with eyes and skin and breathing in spray mist. Wear gloves and eye protection when mixing or using. Use with adequate ventilation. Wash hands and exposed skin thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Viscous liquid
Colour:	Amber
Solubility:	Emulsifiable with water. in water.
Specific Gravity:	0.84
Relative Vapour Density (air=1):	N Av
Vapour Pressure (20 °C):	N Av
Flash Point (°C):	80
Boiling Point/Range (°C):	N Av
pH:	N Av
Evaporation Rate:	N Av

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	Avoid contact with foodstuffs. Avoid exposure to heat, sources of ignition, and open flame.
Incompatible materials:	Incompatible with oxidising agents.
Hazardous decomposition products:	Oxides of carbon.
Hazardous reactions:	None known.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

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Ingestion: No adverse effects expected, however, large amounts may cause nausea and vomiting.

Eye contact: May be an eye irritant.

Skin contact: Contact with skin may result in irritation. May cause skin sensitisation in sensitive individuals. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Inhalation: Material may be irritant to the mucous membranes of the respiratory tract (airways).

Long Term Effects:
Evidence indicates that repeated or prolonged exposure to this chemical could result in effects on the liver.

Toxicological Data: For the constituent However, for constituent(s) (1):
Oral LD50 (rat): 1030-2370 mg/kg (pyrethrum); 7500 mg/kg (piperonyl butoxide)
Dermal LD50 (rat): >1500 mg/kg (pyrethrum)

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways and fishponds. Do not allow spray to drift onto aquatic environments, other crops or desirable plants or outside the target area.

Aquatic toxicity: Very toxic to aquatic organisms.

Terrestrial toxicity: Toxic to bees. Very toxic to terrestrial species.

13. DISPOSAL CONSIDERATIONS

Disposal methods:
Refer to local government authority for disposal recommendations. Empty containers must be decontaminated and destroyed.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as a Dangerous Good according to NZS 5433:2007 Transport of Dangerous Goods on Land.

UN No: 3082
Class-primary 9 Miscellaneous Dangerous Goods
Packing Group: III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PYRETHRINS 1.4%, PIPERONYL BUTOXIDE 5.65%)
Hazchem Code: 2X

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN No: 3082
Class-primary: 9 Miscellaneous Dangerous Goods
Packing Group: III

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Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PYRETHRINS 1.4%, PIPERONYL BUTOXIDE 5.65%)

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN No: 3082
Class-primary: 9 Miscellaneous Dangerous Goods
Packing Group: III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PYRETHRINS 1.4%, PIPERONYL BUTOXIDE 5.65%)

15. REGULATORY INFORMATION

Classification:

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

Subclasses:

Subclass 3.1 Category D (low hazard) - Flammable Liquids.
Subclass 6.3 Category B - Substances that are mildly irritating to the skin.
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Subclass 9.1 Category A - Substances that are very ecotoxic in the aquatic environment.
Subclass 9.4 Category A - Substances that are very ecotoxic to terrestrial invertebrates.

16. OTHER INFORMATION

(1) In: 'The Pesticide Manual'. 13th Edition. Ed. CDS Tomlin. British Crop Protection Society, 2003.

Reason(s) for Issue:

Revised Primary MSDS
Alignment to HSNO requirements

This safety data sheet has been prepared by SH&E Shared Services.

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since DuluxGroup Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their DuluxGroup representative or DuluxGroup Limited at the contact details on page 1.

DuluxGroup Limited's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

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