

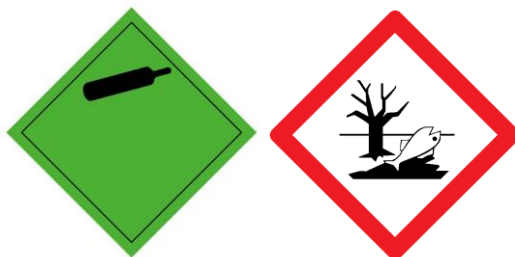


1. IDENTIFICATION OF THE MATERIAL AND THE MANUFACTURER

Product Name	MAC SLAY WASP JET-SPRAY INSECTICIDE All formats: 350g		
Supplier Name	Arandee Ltd		
Address	108 Rockfield Road, Penrose, Auckland 1061, New Zealand		
Telephone	+64 (9) 579 5139		
Emergency	National Poisons Centre -24 hours	Australia	13 11 26
		New Zealand	0800 POISON 0800 764 766
E-mail	sales@arandee.co.nz		
Web Site	http://www.arandee.co.nz		
Synonym(s)	MAC Slay Wasp Insecticide		
Use(s)	Quickly kills wasps and hornets; dual action formulation fast knock down and high kill rate.		
Approval(s)	Environmental Protection Authority HSR101097		

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO GHS AND THE HAZARDOUS SUBSTANCES (MINIMUM DEGREE OF HAZARD) REGS 2001. CLASSIFIED AS A DANGEROUS GOOD, UNDER NZS 5433



Signal Word: WARNING

HAZARD STATEMENTS	H280	Contains gas under pressure, may explode if heated.
	H400	Very toxic to aquatic life.
	H411	Toxic to aquatic life with long lasting effects.
PRECAUTIONARY STATEMENTS	P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
	P251	Pressurized container. Do not pierce or burn, even after use.
	P273	Avoid release to the environment.
	P391	Collect spillage.
	P410+403	Protect from sunlight. Store in a well-ventilated place.
	P412	Do not expose to temperatures exceeding 50°C/122°F.



	P501	Dispose of contents/ container in accordance with national regulations.
OTHER HAZARDS		This product does not contain any substances classified as PTB or vPvB.

3. HAZARDS IDENTIFICATION COMPOSITION OF INGREDIENTS

Ingredient	Concentration	CAS Number
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	60-100%	64742-47-8
CARBON DIOXIDE	1-5%	N/A
CYPHENOTHHRIN	0.15%	39515-40-7
D-TETRAMETHRIN	0.15%	1166-46-7

4. FIRST AID MEASURES

Description of first aid measures

General Information	If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131126; New Zealand 0800 764 766), and follow the advice given. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Skin Contact	Rinse with water.
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
Eye Contact	Rinse with water. Get medical attention if any discomfort continues.
Protection of First Aiders	First aid personnel should wear appropriate protective equipment during any rescue.
First Aid Facilities	Eye wash facilities should be provided.

Most important symptoms and effects, both acute and delayed

General Information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Spray/mists may cause respiratory tract irritation.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur.



Skin Contact	Repeated exposure may cause skin dryness or cracking.
Eye Contact	May be slightly irritating to eyes. May cause discomfort.

Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	Extinguish with alcohol resistant foam, carbon dioxide, dry powder or water fog. Use fire extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant.
Hazards Combustion products	Thermal decomposition or combustion products may include the following substances. Harmful gases or vapours.

Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive -pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to Australia/New Zealand Standards AS/NZS 4967 (for clothing) AS/NZS 1801 (for helmets), AS/NZS 4821 (for protective boots), AS/NZS 1801 (for protective gloves) will provide a basic level of protection for chemical incidents.
Hazchem Code	2YE



6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

Environmental Precautions

Environmental Precautions Avoid discharge into drains or water courses or onto the ground. Avoid discharge to the aquatic environment.

Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames, or other sources of ignition near spillage. Do not allow material to enter confined spaces, due to the risk of explosion. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

Reference to other specifications

Reference to the other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. HANDLING AND STORAGE (INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED)

Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbites or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapours and spray/mists.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.



Storage precautions	Keep away from oxidising materials, heat and flames, Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C / 122°F.
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Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure controls

Personal Protection Equipment



Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

No specific hand protection recommended. Avoid contact with skin.

Other skin and body protection

Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

Respiratory protection

Ensure all respiratory protective equipment is suitable for its intended use and complies with Australia/New Zealand Standard AS/NZS 1716. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with Australia/New Zealand Standard AS/NZS 1716. Full face mask respirators with replaceable filter cartridges should comply with Australia/New Zealand Standard AS/NZS 1716. Half mask and quarter mask respirators with replaceable filter cartridges should comply with Australia/New Zealand Standard AS/NZS 1716.

Environmental exposure controls

Keep container tightly when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.



9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	AEROSOL.	Solubility (water)	NOT AVAILABLE
Odour	SLIGHTLY CHARACTERISTIC ODOUR.	Specific Gravity @25°C	NOT AVAILABLE
pH	NOT AVAILABLE	% Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	HIGHLY FLAMMABLE
Relative Density	~ 0.9	Flash Point	~ -60°C
Melting Point	NOT AVAILABLE	Upper Explosion Limit	NOT AVAILABLE
Boiling Point	NOT AVAILABLE	Lower Explosion Limit	NOT AVAILABLE
Evaporation Rate	NOT AVAILABLE	Auto-ignition Temperature	NOT AVAILABLE

10. STABILITY AND REACTIVITY

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	The following materials may react strongly with the product: Oxidising agents.
Conditions to avoid	Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised container: may burst if heated.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances. Harmful gases or vapours.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity – dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.



Acute toxicity – inhalation

Notes Based on available data the classification criteria are not met.
(inhalation LC₅₀)

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity – in vitro Based on available data the classification criteria are not met.

Carcinogenicity

IARC carcinogenicity Based on available data the classification criteria are not met.

IARC carcinogenicity None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity – fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure

STOT – single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity – repeated exposure

STOT -repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

General information The severity of the symptoms described will vary dependant on the concentration and the length of exposure.



Inhalation	Spray/mists may cause respiratory tract irritation.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	May be slightly irritating to eyes. May cause discomfort.
Route of entry	Ingestion inhalation Skin and/or eye contact.
Target organs	No specific target organs known.

12. ECOLOGICAL INFORMATION

Toxicity Aquatic Acute 1 – H400 Very toxic to aquatic life. Aquatic Chronic 2 – H411 Toxic to aquatic life with long lasting effects.

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Results of PBT and vPvB assessment

Other adverse effects

Other adverse effects None know.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products where possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal method Recycle empty cans if a facility is available or place used can in household rubbish. Do not puncture or incinerate, even when empty.

14. TRANSPORT INFORMATION

CLASSIFIED AS DANGEROUS IN THE MEANING OF ROAD/RAIL (ADG), SEA (INDG) AND AIR (ICAO/IATA) TRANSPORT REGULATIONS.



	Shipping Name	UN No	Packing Group	DG Class	Subsidiary Risk(s)	Hazchem Code
Land	Aerosols	1950	None Allocated	2.2	None Allocated	2YE
Sea	Aerosols	1950	III	2.2	None Allocated	2YE
Air	Aerosols	1950	None Allocated	2.2	None Allocated	2YE

15. REGULATORY INFORMATION

Environmental Protection Agency (EPA) Approved pursuant to HSNO Act 1996,
EPA Approval Number HSR101097

16. OTHER INFORMATION

Hazard statement in full H280 Contains gas under pressure; may explode in heated.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Additional Information ASPHYXIANTS (1): reduce the oxygen concentration by displacement, when present in the atmospheres, in high concentrations. As most simple asphyxiants are odourless, atmospheres deficient in oxygen do not provide adequate sensory warning of danger. Therefore, it is not generally appropriate to recommend an exposure standard for each asphyxiant, but instead warn of the need to maintain oxygen concentrations.

Some asphyxiants may be given an exposure standard, due to their potential for narcotic effects at high concentrations, or an explosion hazard.

Asphyxiants (2) There is a significant hazard associated with workers entering poorly, ventilated areas (e.g. tanks) where oxygen levels may be deficient. An air supplied breathing apparatus may be required if adequate ventilation is not ensured. Refer to AS/NZS 2865 - Safe Working in a Confined Space.

Respirators In general, the best practice to avoid exposure is to use engineering controls, such as adequate ventilation, rather than the use of respirators (which should be limited).
If respiratory equipment must be worn, ensure correct respirator selection and training is undertaken. Some respirators may be extremely uncomfortable, when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

Abbreviations Mg/kg -milligrams per kilogram
mg/m³ - milligrams per cubic metre
mg/L -milligrams per Litre
ppb-Parts per Billion
NOEC -No Observed Effect Concentration
NOAEL – No Observed Adverse Effect Level
LD₅₀ – Dosage that is lethal to 50% of the test population



LC₅₀ – Concentration that is lethal to 50% of the test population
TWA – Time Weighted Average
CAS# – Chemical Abstract Service number - uniquely identifies chemical compounds.
NZEPA – New Zealand Environmental Protection Authority
MPI – New Zealand Ministry of Primary Industries
NZIOC – New Zealand Inventory of Chemicals
WES – Workplace Exposure Standard

**Personal
Protective
Equipment**

The recommendations for protective equipment contained within this SDS report are provided as a guide only, when dealing with an abnormal situation. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before the final selection of personal protective equipment is made.

**Health Effects
from Exposure**

It should be noted that the effects from excess exposure to this product would depend on several factors, including duration of exposure, quantity involved, effectiveness of control measures used; protective equipment and method of application. Given that, it is impractical to prepare an SDS report, which would encompass all possible scenarios, it is anticipated that users will assess the risks in an emergency and apply appropriate control methods.

Report Status

This report is based upon information provided by ingredient manufacturers, and third-party experts. We believe that the information represents the current state of knowledge about safety and handling precautions that are appropriate for this product. Further clarification regarding any aspect of the product should be obtained directly from the Chief Chemist at Arandee Ltd. While Arandee has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy, or completeness. As far as lawfully possible, Arandee accepts no liability for any loss, injury, or damage (including consequential loss) which may be suffered, or incurred by any person, because of their reliance upon the information contained in this Safety Data Sheet.