

Section 1: Identification

Product name: Astro Aerosol Residual Insecticide

Recommended use of the chemical and restrictions on use

Recommended use: Aerosol insecticide for use against Ants, Cockroaches, Fleas, Spiders and Silverfish

Manufacturer or supplier's details

Company: Garrards Pty Ltd.
Address: Unit 4, 27b Cain Road
Penrose, Auckland, New Zealand

Telephone: +64 9 526 5232

Fax Number: +64 9 526 4272

Emergency telephone number: For leak, fire, spill or accident emergencies, call: 0800 734 607 (Ixm)

Medical emergency:

0800 764 766 (NZ Poisons Information Centre)

0800 111174 (24 hour Medical Emergency)

0800 387668 (Transport Emergency)

Section 2: Hazard identification

GHS Classification

Flammable aerosol Category 1

Respiratory Sensitiser Category 1

Skin Sensitiser Category 1

Single Target Organ Toxicant Repeated Exposure Category 2

Hazardous to the aquatic environment - acute hazard: Category 1

Hazardous to the aquatic environment - chronic hazard: Category 1

Hazardous to terrestrial invertebrates

GHS label elements



Hazard pictograms:

Signal word:

Danger

Hazard statements:

H222: Extremely flammable aerosol

H229: Pressurised container: May burst if heated

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H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317: May cause an allergic skin reaction
H373: May cause damage to organs through prolonged or repeated exposure
H400: Very toxic to aquatic life
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

P103: Read label before use
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Pressurised container. Do not pierce or burn, even after use.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves.
P285: In case of inadequate ventilation wear respiratory protection.

Response:

P302+P352: IF ON SKIN:
P304+P342: IF INHALED:
P314: Get medical advice/attention if you feel unwell.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P363: Wash contaminated clothing before reuse.
P391: Collect spillage.

Storage:

P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

Section 3: Composition/information on ingredients

Substance / Mixture: Mixture

Components

Chemical Name	CAS No.	Concentration (% (w/w))
Permethrin	52645-53-1	1

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Paraffinic hydrocarbon	64742-88-7	10-30
Butylated hydroxytoluene	128-37-0	< 1
Non-hazardous components	N/A	Balance

Section 4: First-aid measures

- General advice: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
- If inhaled: Remove to fresh air. If unconscious, place in recovery position and seek medical advice. If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.
- In case of skin contact: If on clothes, remove clothes. If on skin, rinse well with water. Wash off with soap and plenty of water. Get medical attention if irritation develops and persists. If irritation occurs and persists, see a doctor. Wash contaminated clothing before reuse.
- In case of eye contact: If in eyes, hold eye open and flush eyes with water until substance is removed. Protect unharmed eye. Remove contact lenses if present and easy to do so, prior to rinsing. If eye irritation persists, consult a doctor.
- If swallowed: If poisoning occurs call a doctor or Poison Information Center. Do not induce vomiting without medical advice. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed: none known

Protection of first-aiders: Avoid inhalation, ingestion and contact with skin and eyes.

Notes to physician: Treat symptomatically.

Section 5: Fire-fighting measures

- Suitable extinguishing media: Dry chemical
Carbon dioxide (CO₂)
Foam
Soft stream water fog if no alternatives available.
- Unsuitable extinguishing media: High volume water jet

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Specific hazards during
firefighting:

Product is highly flammable. Contents are under pressure.
Propellant is liquefied petroleum gas (LPG). Containers may “rocket”
or “explode” in heat of fire. Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products:

On burning will emit toxic fumes of carbon
monoxide, carbon dioxide, hydrogen chloride,
chlorine etc.

Specific extinguishing methods: Use a water spray to cool fully closed containers. Remove
undamaged containers from fire area if it is safe to do so. Use
extinguishing measures that are appropriate to local circumstances
and the surrounding environment. Collect contaminated fire
extinguishing water separately. This must not be discharged into
drains. Fire residues and contaminated fire extinguishing water must
be disposed of in accordance with local regulations.

Special protective
equipment and precautions
for firefighters:

Isolate fire area. Evacuate downwind. Wear full protective clothing
and self-contained breathing apparatus. Do not breathe or contact smoke,
gases or vapours generated. Fight fire from maximum distance or protected
area. Cool cans using water spray, and use caution when approaching
containers. Contain all runoff.

Hazchem Code: 2YE

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Evacuate personnel to safe areas, upwind of spill/leak. Remove
all sources of ignition. Ensure adequate ventilation. Never attempt to return spills in original
containers for re-use. Mark the contaminated area with signs and prevent access to unauthorized
personnel. Only qualified personnel equipped with suitable protective equipment may intervene.

Environmental precautions:

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the
product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:

In the event of a spill, soak up spilled product with inert absorbent material (e.g. sand, silica gel,
universal binder, sawdust). Shovel into suitable container for disposal. Clean contaminated surface
thoroughly. To clean the floor and all objects contaminated by this material, use plenty of water.

Section 7: Handling and storage

Advice on protection against fire and explosion:

Store in a cool ventilated place, away from sunlight. Product is a highly flammable aerosol in a pressurised container. Keep away from all sources of heat and avoid smoking in the vicinity of the product. Never pierce container even after product is completely used. Ensure that ventilation is adequate when handling.

Advice on safe handling:

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. It is recommended to wear a respirator when using this product.

Hygiene measures:

Avoid contact with skin, eyes and clothing. Do not breathe fumes/vapours/gases. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

Conditions for safe storage:

Store in a dry and well-ventilated place. Containers should be stored upright. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions:

This product is a highly flammable aerosol. It should be stored in a cool area and protected from extreme heat. It should also be protected from frost. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Further information on storage stability:

No decomposition is expected if this product is stored and applied as directed.

Section 8: Exposure controls/personal protection

The following components are subject to control parameters as per the 15th edition of WorkSafe NZ's Workplace exposure standards (WES) and Biological Exposure Indices

Component	CAS	Value type	Control parameter/level
Butylated hydroxytoluene	128-37-0	TWA	10 mg/m ³

Personal protective equipment

Respiratory protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type: Particulates type

Hand protection Material: Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.

Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Eye wash bottle with pure water. Tightly fitting safety goggles

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Impervious, long-sleeved clothing is recommended as well as footwear that are protective against chemicals.

Protective measures: Plan first aid action before beginning work with this product. Always have on hand a first-aid kit, together with proper instructions. Wear suitable protective equipment. When using do not eat, drink or smoke.

Section 9: Physical and chemical properties

Appearance: Clear, pale yellow liquid

Colour: Pale yellow

Odour: Very aromatic, hydrocarbon odour

Odour Threshold: not determined

pH: No data available

Melting point/ range: No data available

Boiling point/boiling range: No data available

Flash point: -104 to -60°C (LPG)

Evaporation rate: No data available

Flammability (solid, gas): Highly flammable gas

Self-ignition: not auto-flammable

Upper explosion limit / Upper flammability limit: No data available

Lower explosion limit / Lower flammability limit: No data available

Vapour pressure: No data available

Relative vapour density: No data available

Relative density: No data available

Density: 0.7 g/mL

Solubility(ies)

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Water solubility: Product suspends in water

Solubility in other solvents: No data available

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

Oxidizing properties: No data available

Surface tension: No data available

Particle size: No data available

Section 10: Stability and reactivity

Reactivity: No decomposition if stored and applied as directed.

Chemical stability: No decomposition if stored and applied as directed. Considered stable for a period of at least 2 years in ambient conditions.

Possibility of hazardous reactions: Will not polymerase.

Conditions to avoid: Keep in a cool place. DO NOT expose to sources of ignition. This product is highly flammable. DO NOT use in confined spaces. DO NOT use close to ignition sources.

Incompatible materials: DO NOT store near corrosive substances

Hazardous decomposition products: When the product is heated to high temperatures, the active constituent will decompose and emit toxic fumes.

Section 11: Toxicological information

Acute toxicity: Not classified based on available information. Experience to date indicates that contact with permethrin may produce skin sensations such as numbing, burning or tingling. These sensations are reversible and usually subside within 12 hours. Large doses of permethrin ingested by laboratory animals produced signs symptoms such as diarrhoea, salivation, tremors and intermittent convulsions. Overexposure of animals to permethrin via inhalation has also produced hyperactivity and hypersensitivity.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation

Classified as a Category 1 skin sensitiser.

Respiratory sensitisation

Classified as a Category 1 respiratory sensitiser.

Chronic toxicity

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Classified as a Category 2 Single Target Organ Toxicant – Repeated Exposure.

Aspiration toxicity

Not classified by the NZ EPA as an aspiration hazard.

Section 12: Ecological information

Ecotoxicity

Classified as Acutely Toxic to aquatic organisms – Category 1

Classified as Chronically toxic to aquatic organisms – Category 1

Classified as toxic to terrestrial invertebrates

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Section 13: Disposal considerations

Disposal methods

Waste from residues: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging: Keep out of reach of children. Do not store near naked flames, or other sources of ignition. Flammable gas. Do not store near (or allow to contact) fertilizers, fungicides or pesticides. Contents under pressure. Do not puncture or incinerate can. Recycle empty cans if a facility can be used. Otherwise place empty can in household rubbish.

Section 14: Transport information

International Regulations

UNRTDG

UN number:	UN 1950
Proper shipping name:	AEROSOLS
Class:	2.1.2
Subsidiary risk:	ENVIRONM.
Packing group:	N/A
Environmentally hazardous:	yes

Special precautions for user: The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

HSNO Approval Number: HSR100084

ACVM: Exempt from registration

Tolerable Exposure Limits (TEL)
Not applicable

Environmental Exposure Limits (EEL)
Not applicable

The components of this product are reported in the following inventories:

TCSI: On the inventory, or in compliance with the inventory

TSCA: Product contains substance(s) not listed on TSCA inventory.

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AIIC: Not in compliance with the inventory

DSL: This product contains the following components that are not on the Canadian DSL nor NDSL.

ENCS: Not in compliance with the inventory

ISHL: Not in compliance with the inventory

KECI: Not in compliance with the inventory

PICCS: Not in compliance with the inventory

IECSC: Not in compliance with the inventory

NZIoC: On the inventory, or in compliance with the inventory

TECI: Not in compliance with the inventory

Section 16: Other information

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Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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