



MATERIAL SAFETY DATA SHEET

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1. IDENTIFICATION

PRODUCT NAME: Enviroshield Residual Insecticide Concentrate

2. HAZARD IDENTIFICATION

HSNO HAZARD CLASSIFICATION: 3.1B, 6.1D, 6.3B, 6.4A, 6.5A, 6.5B, 6.9B, 9.1A, 9.3C, 9.4A.

Classified as hazardous according to the criteria of the Australian Safety and Compensation Council.

Classified as hazardous according to the criteria of HSNO Minimum degree of hazard regulations.

Not classified as Dangerous Goods according to the Australian DG Code 6 for the Transport of Dangerous Goods by Road and Rail in containers up to 500L or kg. (ADG 7, Special Provision AU01).

POTENTIAL HEALTH EFFECTS

Eye: Irritant to eyes.

Skin: Mild skin irritant.

Ingestion: Harmful if swallowed.

Inhalation: May irritate mucous membranes and respiratory system.

Teratogenic and Mutagenic Effects: No data available.

3. COMPOSITION

Ingredient	C.A.S. Number	Proportion
Permethrin	52645-53-1	250g/litre
Isopropyl alcohol	67-63-0	15%
Ethoxylated vegetable oil	61791-12-6	≈ 50%
Hexanedioic acid, bis(1-methylethyl) ester	6938-94-9	10%

4. FIRST AID MEASURES

INHALATION

May cause irritation of upper respiratory tract. Remove patient to fresh air. If ill effects persist call a doctor.

EYE CONTACT

Rinse immediately with plenty of fresh water for at least 15 minutes holding eyelids open if necessary to flush underneath. Seek medical advice

INGESTION

If swallowed, wash out mouth with water. Do **not** induce vomiting. Keep patient at rest and seek medical advice immediately.

SKIN CONTACT

Wash affected area with soap and water immediately. Remove and wash any contaminated clothing and launder before using again. May induce an allergic response in susceptible individuals. These skin sensations are reversible and usually subside within 12 hours. Seek medical advice if irritation persists.

If poisoning occurs immediately contact a doctor or the NATIONAL POISONS CENTRE 0800 POISON (0800 764 766) and follow the advice given. Show this Material Safety Data Sheet to the doctor.

5. FIRE/EXPLOSION MEASURES

Clear fire area of all non-emergency personnel.

Extinguishing media : Water spray, foam, dry chemical or carbon dioxide. Fire fighters should wear a full set of protective clothing, including self-contained breathing apparatus. Toxic fumes may be emitted during combustion.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS: In the event of a major spill, prevent spillage from entering drains or watercourses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Floor may be slippery if wet. Eliminate all ignition sources and naked lights. Use non sparking equipment. Wear full protective clothing including face mask, face shield and gauntlets. All skin areas should be covered. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled spill recovery drums or other suitable containers. for recycling, salvage or appropriate disposal. After spills, swab wash area preventing any runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

7. HANDLING AND STORAGE

Store in original container, tightly sealed, in a cool, dry ventilated place away from direct sunlight. Store away from feed and foodstuffs, children and animals. The methods of storage, handling, use and record keeping must be in accordance with NZS 8409-2004 "Management of Agrichemicals" and local and regional council regulations.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Wear approved mask, overalls, boots, gloves, safety goggles or safety glasses when using. Wash used protective clothing before storage or reuse. Wash hands before eating, smoking or using the toilet and shower after removing protective clothing at the completion of work. Do not smoke or eat while using. Only use in a well ventilated area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Transparent pale amber liquid.

Odour: Slightly pungent alcohol like.

Solubility in Water: Emulsifies

Specific Gravity:

Flash Point: 11.6 deg. C (solvent)

Boiling point: 82.5 deg. C (solvent)

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use.

Incompatibility. Avoid contact with strong acids, alkalis and oxidising agents.

Corrosive properties: Not corrosive.

Hazardous Decomposition Products: Hazardous gases may be formed during thermal decomposition but product is unlikely to spontaneously decompose.

Hazardous Polymerization: This product is unlikely to spontaneously polymerise.

11. TOXICOLOGICAL INFORMATION**TOXICITY OF ACTIVE INGREDIENT PERMETHRIN:**

Acute oral toxicity: LD₅₀ 430-4,000 mg/kg (rat)

Acute dermal toxicity: LD₅₀ >4,000 mg/kg (rat)

Acute inhalation toxicity: LC₅₀ >23.5g/m³ (rat, 4 hours)

Irritant effect on skin: Mild irritant.

Irritant effect on eyes: Irritant

Teratogenic effects: Permethrin is reported to show no teratogenic activity.

Mutagenic effects: Permethrin is reported to show no mutagenic effects.

Carcinogenic effects: The evidence regarding the carcinogenicity of permethrin is inconclusive.

Organ toxicity: Permethrin is suspected of causing enlargement of the liver and nerve damage. Effects on the immune system have been noted in animal studies.

Reproductive effects: The fertility of female rats was affected when they received very high oral doses of 250 mg/kg/day of permethrin during the 6th to 15th day of pregnancy. It is unlikely that reproductive effects would be seen in humans under normal circumstances.

12. ECOLOGICAL INFORMATION

Bioaccumulative effects: The active ingredient permethrin has a low to moderate potential to accumulate. Half-life in soil < 38 days.

Fish toxicity LC₅₀ 0.0054 mg/L (48h, rainbow trout). Method : test result of a related preparation.

Bird toxicity: LD₅₀ > 900 mg/kg (mallard ducks). Method: test result of a related preparation.

Toxicity to bees : Permethrin is extremely toxic to bees.

Remarks

Permethrin is extremely toxic to aquatic life. Do not allow product to enter storm water systems, rivers, lakes, creeks or other water bodies.

13. DISPOSAL CONSIDERATIONS

Product disposal: Dispose of this product by using in accordance with label instructions, by incineration in an approved controlled furnace with combustion gas scrubbing and emission gas control or by other approved means. Avoid contamination of any water supply with product or empty container.

Container disposal: Triple rinse the empty container adding rinse water to the spray tank. Crush or puncture empty rinsed container and recycle if appropriate or dispose of in an approved landfill in accordance with local authority regulations. Do not use container for any other purpose.

14. TRANSPORT INFORMATION

Rail/Road (RID/ADR) UN No.: 3082
 Class: 9
 Packing Group: III
 Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (PERMETHRIN SOLUTION)

Sea (IMDG-Code) UN No.: 3082
 Class: 9
 Packing Group: III
 Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (PERMETHRIN SOLUTION)
 Marine Pollutant: Marine Pollutant for Marine Transport

15. REGULATORY INFORMATION

HSNO Approval Number: HSR00306

HSNO Controls (inc. Tracking): Records of use, as described in the current version of NZS 8409 Management of Agrichemicals must be kept if more than 3 L is applied or discharged within 24 hours in a place where the substance is likely to enter air or water and leave the place. See www.epa.govt.nz for full listing of controls.

Approved Handler Requirement: This product must be under the control of an approved handler when applied in a wide dispersive manner or used by a commercial contractor

16. OTHER INFORMATION

- 3.1B** Flammable liquid - high hazard.
- 6.1D** May be harmful if swallowed, inhaled or absorbed through skin.
- 6.3B** Mild skin irritant.
- 6.4A** May irritate the eyes.
- 6.5A** May cause respiratory sensitisation.
- 6.5B** May cause sensitisation from prolonged skin contact.
- 6.9B** May cause organ damage from repeated oral exposure
- 9.1A** Very toxic to aquatic life.
- 9.3C** Harmful to terrestrial vertebrates.
- 9.4A** Very toxic to terrestrial invertebrates.

EMERGENCY CONTACT

Enviroshield NZ Ltd. Phone: 02041318249

It is the responsibility of the user to ensure that the most up to date version of this safety data sheet is used. This Safety Data Sheet summarises information on this product, and how to safely handle and use it. The user of the product should become familiar with this Safety Data Sheet and the product label and consider the information in the context of how the product will be handled and used. Enviroshield NZ Ltd. assumes no responsibility for the accuracy, completeness or suitability of this information. The user is responsible for determining the suitability and accuracy of this information for their particular purposes. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Always read the product label before use