

# SAFETY DATA SHEET

## BESTOXpc50 RESIDUAL INSECTICIDE

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Material Identification** BESTOXpc50 RESIDUAL INSECTICIDE  
**Product description** Alpha-cypermethrin insecticide.  
**Use** Residual and knockdown insecticide for general pest control

**New Zealand Distributor** Garrards (NZ) Ltd  
Unit 4/27B Cain Road  
Penrose, New Zealand

**Telephone** (09) 526 5232  
**Fax** (09) 526 4272

**24-hour Emergency phone** National Poisons Centre 0800 POISON (0800 764766)

**Date of Issue** 3 February 2015

### 2. HAZARDS IDENTIFICATION

This product is hazardous under the HSNO (minimum degrees of hazard) Regulations 2001.

**Pictograms:**



**Irritant**    **Chronic**    **Ecotoxic**

**Signal Word: WARNING**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Category 5
6.3B	H316	Causes mild skin irritation.	Category 3
6.4A	H319	Causes serious eye irritation.	Category 2A
6.9B	H373	May cause damage to organs through prolonged or repeated exposure.	Category 2
9.1A	H410	Very toxic to aquatic life with long lasting effects.	Category 1
9.4A	H441	Very toxic to terrestrial invertebrates.	-

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fumes, mist, vapours and spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.

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P280	Wear protective clothing.
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Response code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P331	Do NOT induce vomiting.
P391	Collect spillage.
P305+ P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Triple rinse empty container and add rinsings to spray tank. If recycling, replace cap and return clean containers to recycler or designated collection point.

## 3.COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Proportion
Alpha-cypermethrin	67375-30-8	50g/L
Other Ingredients	not allocated	Balance

## 4. FIRST AID MEASURES

<b>Inhalation</b>	If inhaled, remove to fresh air. If breathing discomfort occurs, contact a doctor immediately.
<b>Skin contact</b>	If spilt on the skin, remove contaminated clothing and wash affected areas of skin immediately. DO NOT Scrub the skin. Remove and wash contaminated clothing before re-use.
<b>Eye contact</b>	If concentrate is splashed in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or seek medical advice.
<b>Ingestion</b>	If swallowed, DO NOT induce vomiting. For advice, contact the National Poisons Centre 0800 POISON (0800 764766) or call a doctor immediately.

## 5. FIRE FIGHTING MEASURES

<b>Flashpoint</b>	Non flammable
<b>Extinguishing Media</b>	Soft stream water, fog, foam, CO <sub>2</sub> or dry chemical.
<b>Fire Fighting Instructions</b>	Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment Shut off source of fuel, if possible and without risk. Use water spray. Cool tank/container with water spray. Fight fire

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from maximum distance, use extreme caution as heat may decompose material and rupture containers.

If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated.

## Combustion products

Hazardous gases produced in a fire under conditions that produce incomplete combustion may consist of carbon monoxide, carbon dioxide, hydrogen chloride, chlorine, fluorine and hydrogen fluoride.

## Hazchem Code

2X

## 6. ACCIDENTAL RELEASE MEASURES

### Spill precautions

Use appropriate Personal Protective Equipment during clean up. (See section 8). Evacuate personnel, thoroughly ventilate area, and use self contained breathing apparatus. Remove source of heat, sparks, flame, impact friction or electricity. Keep upwind of leak - evacuate until gas has dispersed.

### Spill containment

Dyke spill. Prevent liquid from entering sewers, waterways on low areas.

### Spill clean up

Soak up with sawdust, sand or other absorbent material. Shovel or sweep up. Never return to container for reuse. DO NOT flush to surface water or sanitary sewer system. To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing with bleach or caustic soda ash solution. Absorb as above and add to the drums of waste already collected. See section 13 for disposal directions.

## 7. HANDLING AND STORAGE

### Handling

Read label before use. Do not breathe vapour or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Wash clothing after use. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. Wear protective clothing.

### Storage

Store product in original container, tightly closed, away from other pesticides, fertiliser, food or feed and under lock and key. Store in a cool, well ventilated location. Avoid excess heat. Not for use or storage in or around the home. Do not store with Classes 1, 2, 3.2, 4, 5 substances. Stores containing more than 100L of this product, either alone or in aggregate with other hazardous substances are subject to requirement of an emergency management plan, secondary containment and signage. Keep out of reach of children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

None set

### Engineering Controls

Thoroughly ventilate all transport vehicles prior to unloading. General air replacement or dilution ventilation is sufficient for material handling and storage, but local exhaust ventilation should be used when filling or

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## Personal Protection

emptying this product.

During mixing/loading and application or repairing and cleaning of equipment and disposal of the substance: Wear long sleeve shirt; long-legged pants; shoes and socks; chemical resistant gloves; face shield or goggles; NZS8049 approved respirator.

IMPORTANT! Always wash hands, face and arms with soap and water before smoking, eating drinking.

AFTER WORK: Before removing gloves, wash them with soap and water. Take off all work clothes and shoes. Shower using soap and water. Wear only clean clothes when leaving job - do not wear contaminated clothing. Personal clothing worn during work must be stored and laundered separately from protective clothing and household articles. Store protective clothing separately from personal clothing. Clean or launder protective clothing after each use. Respirators must be cleaned and filters replaced according to instructions included with respirators.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Colour	White to tan
Odour	Not available
Odour Threshold	N/A
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not applicable
Specific Gravity	1.02 – 1.03 @ 20°C
Flash Point	> 100°C
Flammability	Non Flammable
Upper and Lower Exposure Limits	Not applicable
Solubility	Product suspends in water
Corrosivity	Non corrosive. Compatible with aluminium, HDPE, glass and Polyethylene lined steel containers
pH	Not applicable
Vapour Pressure	Not available
Vapour Density	Not available
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available

## 10. STABILITY AND REACTIVITY

Stability	Stable at normal temperatures and storage conditions.
Incompatible materials	No incompatibilities reasonably foreseeable.
Conditions to avoid	Extreme temperatures
Decomposition Products	Incomplete combustion may consist of carbon monoxide, carbon

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dioxide, hydrogen chloride, chlorine, fluorine and hydrogen fluoride

## 11. TOXICOLOGICAL INFORMATION

### Acute Effects:

Swallowed	May be harmful if swallowed. (Acute oral LD <sub>50</sub> = 3,184mg/kg for the rat) Large toxic doses administered to laboratory animals have produced symptoms such as loss of motor control, tremors, decreased activity, motor ataxia and hypersensitivity to sound.
Dermal	Not applicable.
Inhalation/Respiratory	Not applicable.
Eye	Causes serious eye irritation.
Skin	Causes mild skin irritation.

### Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Systematic	Not applicable.
STOT/SE	Not applicable.
STOT/RE	May cause damage to organs through prolonged or repeated exposure.

## 12. ECOLOGICAL INFORMATION

HSNO Classes:                    **9.1A = Very toxic to aquatic life with long lasting effects.**  
   **9.4A = Very toxic to terrestrial invertebrates.**

Alpha-cypermethrin is rapidly degraded in soil with a half-life of 2 to 4 weeks. It is readily hydrolysed under basic conditions (pH=9), but under acid or neutral conditions, hydrolysis half-life can be 20 to 29 days. Cypermethrin has a high affinity for organic matter and a Log P<sub>ow</sub> of 5.0; yet because of the ease with which the material undergoes degradation, it has a very low potential for bioaccumulation and is not mobile in soil.

Alpha-cypermethrin is considered highly toxic to fish and aquatic arthropods and has LC<sub>50</sub> values which range from 0.93 µg/L to 2.8 µg/L. Care should be taken to avoid contamination of the aquatic environment. Do not contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.

Alpha-cypermethrin is slightly toxic to birds and oral LD<sub>50</sub> values are greater than 10,248 mg/kg. Toxic to bees LD<sub>50</sub> = 0.059µg/bee.

Do not contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.

### Persistence and Degradability

Alpha-cypermethrin                    Rapidly degradable in soil.

### Bioaccumulation

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Alpha-cypermethrin Very Low

## Mobility in soil

Alpha-cypermethrin No data available

Other adverse effects No data available

## 13. DISPOSAL CONSIDERATION

Triple rinse empty container and add rinsings to spray tank. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. Empty containers and product should not be burnt. Do not re-use empty containers.

Dispose of this product only by using in accordance with label directions. Dispose of solid contaminated material/or contaminated soil in an approved landfill. Disposal must be in accordance with applicable local regulations.

## 14. TRANSPORT INFORMATION

This product is classified as a Dangerous Good for land transport under NZS 5433: 2012.

### Road, Air, Marine

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Contains 5% alpha-cypermethrin)
D.G. Class	9
UN Number	3082
Hazchem	2X
Pack Group	III
Marine Pollutant	Yes

If the product/combination of packages is shipped in quantities less than 5lt/kg, this is exempt from DG information requirements, provided an SDS is issued.

## 15. REGULATORY INFORMATION

EPA Approval Code HSR000295

### Trigger quantities for this substance

	Trigger Quantity
Approved Handler	Yes - Any if: a) Applied in a wide dispersive manner b) Used by a commercial contractor.
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	100L (9.1A)
Emergency Response Plan trigger Quantities	100L (9.1A)
Secondary Containment	100L(9.1A)

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## Restriction of Use:

The substance must not be applied onto or into water.

## 16. OTHER INFORMATION

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists.
DT <sub>50</sub>	Time(days) for 50%loss.
EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
ERMA	Environmental Risk Management Authority
HSNO	Hazardous Substances and New Organisms.
IARC	International Agency for Research on Cancer.
K <sub>oc</sub>	Organic carbon partition coefficient (ml soil water/g organic carbon)
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
NOEL	No observable effect level.
OSHA	American Occupational Safety and Health Administration.
P <sub>ow</sub>	The octanol-water partition coefficient is the ratio of the concentration of a chemical in octanol and in water at equilibrium at a specified temperature.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

### Miscellaneous

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process

The information herein is given in good faith, but no warranty, express or implied is made.  
Please contact the New Zealand proprietor, Garrards New Zealand, if further information is required.

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