



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product **Resolva Bug Killer Concentrate**

Usage Home and garden insecticide concentrate

Manufacturer Westland Horticulture Ltd
14 Granville Industrial Estate
Granville Road
Dungannon
County Tyrone
BT70 1NJ

Email www.gardenhealth.com

Emergency Tel 08700 663566 (UK)

2. HAZARDS IDENTIFICATION

Classification of the Substance according to Directive 1999/45/EC:

Classification: N
Most important adverse effects: Toxic to aquatic life with long lasting effects

Label Elements:

Hazard Symbol: Dangerous for the environment



Risk Phrases: R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Risk Advice to Man and the Environment:



May cause temporary itching, tingling, burning or numbness of exposed skin called paresthesia

3. COMPOSITION/INFORMATION ON INGREDIENTS

Description Insecticide containing 0.75 g/l lambda cyhalothrin as a concentrated micro-emulsion

Hazardous Ingredients

This product contains ingredients, substances, mixtures, impurities or stabilizing additives required to be declared under Article 18(2) of Regulation (EC) No 1272/2008. EEC Annex I of Directive 67/548/EEC contains a list of harmonised classifications and labelling for substances or groups of substances and the following Risk Phrases/Safety phrases (where applicable) are relevant to anyone using or handling this product:

CAS Number	Active Ingredient	Concentration	Directive 67/548/EEC	
			Warning Symbols	'R' Phrase(s)
91465-08-6	Lambda cyhalothrin	0.075% W/W	 N  T+	R21 R25 R26 R50/53

For the full text of the R phrases mentioned in this section, see section 16.

4. FIRST AID MEASURES

General Advice: Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.

Inhalation: Move person to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or Poison Control Centre immediately.

Skin Contact: Take off all contaminated clothing and shoes immediately.
Wash off immediately with plenty of water.
If skin irritation persists call a physician.
Wash contaminated clothing before re-use.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses and continue flushing.
Immediate medical attention is required.

Ingestion: If swallowed seek medical advice immediately and show container or label.
Do NOT induce vomiting.

Treatment (Medical Advice):
Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours
Treat symptomatically



5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

- Extinguishing media – small fires: Use water spray, alcohol-resistant foam dry chemical or carbon dioxide
- .Extinguishing media – large fires: Alcohol resistant foam or Water spray

Extinguishing Media Which Must Not Be Used For Safety Reasons:

Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising From the Substance Or Mixture:

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).
Exposure to decomposition products may be a hazard to health

Special Protective Equipment for Fire Fighters:

Wear full protective clothing and self-contained breathing apparatus.

Further Information:

Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment And Emergency Procedures:

Refer to protective measures listed in sections 7 and 8.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.

Methods and Materials for Containment and Cleaning Up:

Contain Spillage, and then collect with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations

Additional Advice: If the product contaminates rivers and lakes or drains inform respective authorities.



7. HANDLING AND STORAGE

Handling:

- No special protective measures against fire required.
- Avoid contact with skin, eyes and clothing
- When using do not eat, drink or smoke
- Wash hands thoroughly after work

Storage:

- No special storage conditions required
- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep out of the reach of children
- Keep away from food, drink and animal feed stuffs

Specific End Uses:

Use only as insecticide according to the instruction on the label

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Component(s)	Exposure Limit(s)	Type of exposure limit	Source
Lambda Cyhalothrin	0.04 mg/m ³ skin	8 h TWA	SYNGENTA

Exposure Controls

Engineering Measures: Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.
The extent of these protection measures depends on the actual risks in use.
If airborne mists or vapors are generated, use local exhaust ventilation controls.
Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.
Where necessary, seek additional occupational hygiene advice.

Protective Measures: The use of technical measures should always have priority over the use of personal protective equipment
When selecting personal protective equipment, seek appropriate professional advice
Personal protective equipment should be certified to appropriate standards

Respiratory Protection: No personal respiratory protective equipment normally required.
A particulate filter respirator may be necessary until effective technical measures are installed.



- Hand Protection:** Chemical resistant gloves should be used.
Gloves should be certified to an appropriate standard
Gloves should have a minimum breakthrough time that is appropriate to the duration of the exposure
The breakthrough time of gloves varies according to the thickness, material and manufacturer
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough
Suitable material: Nitrile rubber
- Eye Protection:** Eye protection is not usually required
Follow any site specific eye protection policies
- Skin and Body Protection:** Assess the exposure and select chemical resistant clothing based on the potential for contact and permeation/penetration characteristics of the clothing material
Wash with soap and water after removing protective clothing
Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc)
Wear as appropriate: impervious protective suit

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance:** Colourless to brownish liquid
Odour: Oily

Other Properties:

	Value	Temperature	Method
pH	3 – 7 at 1% W/V		
Flash Point	>100°C at 99.5 kPa		Pensky-Martens c.c
Density	1.000 g/ml		

- Oxidising Properties:** Not oxidizing
Explosive Properties: Not explosive

10. STABILITY AND REACTIVITY

- Hazardous Decomposition:** Product stable under normal conditions of use and storage
Combustion or thermal decomposition will evolve toxic and irritant vapours
- Hazardous Reactions:** None known. Hazardous polymerization does not occur.



11. TOXICOLOGICAL INFORMATION

Information given is based on data on the components and the toxicology of similar products

- Acute Oral Toxicity:** LD50 Median lethal dose rat, >2,000 mg/kg
- Acute Inhalation Toxicity:** LC50 Median lethal concentration rat, >6.60 mg/l, 4h
- Acute Dermal Toxicity:** LD50 Median lethal dose rat, >5,000 mg/kg
- Skin Irritation:** Rabbit: Slightly Irritating
May cause temporary itching, tingling, burning or numbness of exposed skin called paresthesia
- Eye Irritation:** Rabbit: Mildly Irritating
- Sensitization:** Guinea pig: not a skin sensitizer in animal tests.
- Long Term Toxicity:** Did not show mutagenic, carcinogenic or teratogenic effects in animal experiments.

12. ECOLOGICAL INFORMATION

Persistence and Degradability

- **Stability in Water:** Degradation half life: 56 d. Lambda Cyhalothrin is not persistent in water.
- **Stability in Soil:** Degradation half life: ca 7d. Lambda Cyhalothrin is not persistent in soil.
- **Mobility in Soil:** Lambda Cyhalothrin is immobile in soil.
- **Bioaccumulative Potential:** Lambda Cyhalothrin bioaccumulates

Toxicity

The toxicity data is based on test results obtained with similar product

- **Toxicity To Fish:** LC50 *Oncorhynchus mykiss* (rainbow trout), 2.0 mg/l, 96h
GHS classification: Category 2
- **Toxicity To Aquatic Invertebrates:** EC50 *Daphnia magna* (water flea), 0.18 mg/l 48h
GHS Classification: Category 1



13. DISPOSAL CONSIDERATIONS

Product: Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated Packaging: Empty remaining contents.
Triple rinse containers. The rinse water should be added to the final spray solution. It must not be put down the drain, sink or toilet
Completely empty containers can be put in the bin or disposed of in compliance with applicable local regulations.
Do not reuse empty containers.

14. TRANSPORT INFORMATION

Land Transport (ADR /RID) UN Number: 3082
Class: 9
Labels: 9
Packaging Group: III
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (LAMBDA CYHALOTHRIN)

Sea Transport (IMDG) UN Number: 3082
Class: 9
Labels: 9
Packaging Group: III
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (LAMBDA CYHALOTHRIN)
Marine Pollutant

Air Transport (IATA-DGR) UN Number: 3082
Class: 9
Labels: 9
Packaging Group: III
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (LAMBDA CYHALOTHRIN)



15. REGULATORY INFORMATION

Registration Numbers: MAPP 16220
PCS 04076

Classification of the Substance according to Directive 1999/45/EC:

Classification: N
Hazard Symbol: Dangerous for the environment

Risk Phrases

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S- Phrases

S2 Keep out of the reach of children
S13 Keep away from food, drink and animal feeding stuffs
S20/21 When using do not eat, drink or smoke
S24 Avoid contact with skin
S35 This material and its container must be disposed of in a safe way
S57 Use appropriate containment to avoid environmental contamination

16. OTHER INFORMATION

Full text of R Phrases referred to under Section 3:

R2 Harmful in contact with skin
R25 Toxic if swallowed
R26 Very toxic by inhalation
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Abbreviations and Acronyms

CAS No	Chemicals Abstract Service Registry Number
MAPP	Ministerially Approved Pesticide Product
PCS	Pesticide Control Service
Directive 67/548/EEC	Dangerous Substances Directive
Directive 91/689/EEC	Directive on Hazardous Waste
IMDG Code	International Maritime Dangerous Goods Code
ADR	International carriage of dangerous Goods by Road

Further information

Before using this product, ensure that you read and understand its label. Follow the instructions

The information in this Safety Data Sheet has been prepared in accordance with the applicable European Directives. The information is believed to be correct at the time of going to press. Always read the label and product information before use. For further information please contact Westland Horticulture Ltd, 14 Granville Industrial Estate, Granville Road, Dungannon, County Tyrone, BT70 1NJ.