



# Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Resolva Bug Killer Concentrate

Version: 1.0

Revision date: 8<sup>th</sup> February 2018

Print date: 8.2.2018

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

**1.1 Product** Resolva Bug Killer Concentrate

**1.2. Relevant identified uses of the mixture** Home and garden insecticide

**1.3 Details of the supplier of the safety data sheet:**

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

**Email** [customerservice@WestlandHorticulture.com](mailto:customerservice@WestlandHorticulture.com)


**1.4 Emergency Telephone number** 01480 443789 (UK) 24hrs

## 2. HAZARDS IDENTIFICATION

**2.1 Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:**

Aquatic Acute 1	H400	Very toxic to aquatic life
Aquatic Chr 1	H410	Very toxic to aquatic life with long lasting effects

**2.2 Label Elements According to Regulation (EC) No 1272/2008:**

Hazard Pictograms	GHS09 – Environmentally damaging	
Signal Word	Warning	
Hazard Statements	H410	Very toxic to aquatic life with long lasting effects

Precautionary Statements

P273	Avoid release to the environment
P391	Collect spillage
P501	Dispose of contents/container to an approved waste disposal plant



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Supplemental Information

EUH401

To avoid risks to human health and the environment, comply with the instructions for use.



## 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: None

3.2 Mixtures

**Description** Insecticide containing 0.75 g/l lambda cyhalothrin as a concentrate

### Hazardous Ingredients

Ingredient	Identifiers	Concentration %W/W	Warning Symbols	Directive 67/548/EEC	Regulation (EC) No 1272/2008 (CLP)
Lambda cyhalothrin	EC: 415-130-7 CAS: 91465-08-6	0.075% W/W	 	T+; R21, R25, R26 N; R50/53	Acute Tox. 3; H301, H311 Acute Tox. 2; H330 Aquatic Acute 1; H400 Aquatic Chr. 1; H410

### Additional information:

For the full text of the H Statements, see section 16.

## 4. FIRST AID MEASURES

4.1 Description of first aid measures

**General Information:** 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.



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**Skin Contact:** Remove 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.

#### 4.2 Most Important symptoms and effects, both acute and delayed:

Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

## 5. FIRE FIGHTING MEASURES

#### 5.1 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

**Unsuitable Extinguishing Media:** Do not use a solid water stream as it may scatter and spread fire.

#### 5.2 Special 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

#### 5.3 Advice for Fire Fighters:

Wear full protective clothing and self-contained breathing apparatus.

#### Additional Information:

Do not allow run-off from fire fighting to enter drains or water courses.

Cool closed containers exposed to fire with water spray.



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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental Precautions:

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

### 6.3 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

**6.4 Additional Information:** If the product contaminates rivers and lakes or drains inform respective authorities.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe 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

### 7.2 Conditions for safe storage, including any incompatibilities

- 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

### 7.3 Specific End Uses:

Use only as insecticide according to the instruction on the label

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION



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## 8.1 Control Parameters

### 8.1.1 Occupational exposure limits:

Limit value type (country of origin)	Substance name	EC-No.	CAS-No.	Occupational exposure limit value		Monitoring And observation processes	Peak limitation	Source
				Long term	Short term			
OEL (EU)	Lambda Cyhalothrin	415-130-7	91465-08-6	0.04 mg/m <sup>3</sup> skin		8 h TWA		SYNGENTA

8.1.2 Biological limit values: N/A

8.1.3 Exposure limits at intended use: N/A

8.1.4 DNEL/PNEC-values: N/A

8.1.5 Risk management measures according to used control banding approach: N/A

## 8.2 Exposure Controls

**8.2.1 Appropriate engineering controls:** 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.

### 8.2.2 Personal protective equipment:

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.



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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 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:

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

**8.2.3 Environmental exposure controls:** Very toxic to aquatic life with long lasting effects. Do not allow this product to run into ponds or water courses.

**Consumer exposure control:** See SECTION 2.1

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

**Appearance:** colourless to brownish liquid

**Physical state:** Liquid

**Colour:** colourless to brownish

**Odour:** sweet

**Odour threshold:** unknown



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## 9.2 Other information:

	Value	Concentration	Method	Temperature	Pressure	Remark
pH	3.5-5.5	% w/v	-	25 °C	-	-
Melting point/freezing point	-	-	-	-	-	-
Initial boiling point/boiling range	-	-	-	-	-	-
Flash point	>100 °C	-	-	-	-	-
Evaporation rate	-	-	-	-	-	-
Flammability (solid, gas)	-	-	-	-	-	-
Upper/lower flammability or explosive limits	-	-	-	-	-	-
Upper explosive limits	-	-	-	-	-	-
Lower explosive limits	-	-	-	-	-	-
Vapour pressure	-	-	-	-	-	-
Vapour density	-	-	-	-	-	-
Relative density	1.00g/ml	-	-	20°C	-	-
Solubility(ies)	-	-	-	-	-	-
Partition coefficient: n-octanol/water	-	-	-	-	-	-
Auto-ignition temperature	> 650 °C	-	-	-	-	-
Decomposition temperature	-	-	-	-	-	-
Viscosity	30.3 mN/m	-	-	20°C	-	-
Viscosity, dynamic	-	-	-	-	-	-
Viscosity, cinematic	-	-	-	-	-	-
Explosive properties	N/A	-	-	-	-	-
Oxidising properties	N/A	-	-	-	-	-

### Physical hazards:

**Flammable aerosols:** Testing is not required for foam aerosols or spray aerosols.

**Flammable solids:** N/A

**Oxidising solids:** N/A

**Assessment / Classification:** N/A



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## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity:** Product stable under normal conditions of use and storage
- 10.2 Chemical stability:** Product stable under normal conditions of use and storage
- 10.3 Possibility of hazardous reactions:** None known. Hazardous polymerization does not occur.
- 10.4 Conditions to avoid:** None known
- 10.5 Incompatible materials:** None known
- 10.6 Hazardous decomposition products:** Combustion or thermal decomposition will evolve toxic and irritant vapours

## 11. TOXICOLOGICAL INFORMATION

### Toxicokinetics, metabolism and distribution

#### 11.1 Information on toxicological effects

The toxicological data has been taken from products of similar composition

**11.1.1 Acute toxicity:** LD50 Median lethal dose female rat, >2,000 mg/kg

**Acute Inhalation Toxicity:** LC50 Median lethal concentration male and female rat, >6.60 mg/l, 4h

**Acute Dermal Toxicity:** LD50 Median lethal dose male and female rat, >5,000 mg/kg

**Skin corrosion/ Irritation:** Rabbit: Slightly Irritating  
May cause temporary itching, tingling, burning or numbness of exposed skin called paresthesia

**Eye Damage/Irritation:** Rabbit: Mildly Irritating

**Respiratory or Skin Sensitization:** Buehler test guinea pig: not a skin sensitizer in animal tests.





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## CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Lambda cyhalothrin did not show mutagenic, carcinogenic or reproductive toxicity effects in animal experiments.

**Other information:** No adverse effect has been observed in chronic toxicity tests

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

**Aquatic Toxicity:** LC50 *Oncorhynchus mykiss* (rainbow trout), 2.0 mg/l, 96h

**Aquatic Invertebrates:** EC50 *Daphnia magna* (water flea), 0.18 mg/l, 48h

**Toxicity To Aquatic Plants:** Lambda cyhalothrin:

EbC50 *Pseudokirchneriella subcapitata* (green algae), >1 mg/l, 96 h

ErC50 *Pseudokirchneriella subcapitata* (green algae), >1 mg/l, 96 h

### 12.2 Persistence and Degradability

**Biodegradability:** Lambda cyhalothrin is not biodegradable

**Stability in Water:** Lambda cyhalothrin : Degradation half life: 7 d. Not persistent in water.

**Stability in Soil:** Lambda cyhalothrin : Degradation half life: 56 d. Not persistent in soil.

**12.3 Bioaccumulative Potential:** Lambda cyhalothrin bioaccumulates

**12.4 Mobility in Soil:** Lambda cyhalothrin is immobile in soil

**12.5 Results of PBT and vPvB assessment:** Lambda cyhalothrin is not identified as PBT nor vPvB substance

**12.6 Other adverse effects:** Classification of the product is based on the summation of the concentrations of classified components



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## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**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)	Inland waterway transport (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1 UN No.</b>	UN 3082	UN 3082	UN 3082	UN 3082
<b>14.2 UN Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LAMBDA-CYHALOTHRIN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LAMBDA-CYHALOTHRIN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LAMBDA-CYHALOTHRIN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LAMBDA-CYHALOTHRIN)
<b>14.3 Transport hazard class(es)</b>	9	9	9	9
<b>Hazard label(s)</b>	III	III	III	III
<b>14.4 Packing group</b>	9	9	9	9
<b>14.5 Environmental hazards</b>	Environmentally hazardous	Marine pollutant	Marine pollutant	N/A

**14.6 Special precautions for user:** None

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**Additional information:** None



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## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance of mixture:

This mixture is classified and labelled according to the CLP Regulation (EC) No 1272/2008

#### 15.1.1 EU regulations

**Registration Numbers:** MAPP 16220  
PCS 04076

**Contains:** Lambda Cyhalothrin

**15.2 Chemical Safety Assessment:** A Chemical Safety Assessment is not required for this mixture

## 16. OTHER INFORMATION

### 16.1 Indication of changes

### 16.2 Abbreviations and Acronyms

ADR	International Carriage of Dangerous Goods by Road
CAS No	Chemicals Abstract Service Registry Number
Directive 67/548/EEC	Dangerous Substances Directive (DSD)
EC No	European Community Number for chemicals within EU regulations
IATA-DGR	Dangerous Goods Regulations by the International Air Transport Association
IMDG Code	International Maritime Dangerous Goods Code
MAPP	Ministerially Approved Pesticide Product
PCS	Pesticide Control Service
PBT	Persistent, Bioaccumulative and Toxic Properties
Regulation (EC) No 1272/2008	Classification, Labelling and Packaging (CLP)
RID	International Transport of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative Properties

### 16.3 Key literature references and sources for data



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**16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008**  
[CLP]: See SECTION 2.1 (classification).

## 16.5 Relevant H- and EUH-phrases (number and full text):

H301	Toxic if swallowed
H311	Toxic in contact with skin
H330	Fatal if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

**16.6 Recommended uses and restrictions:** Follow the instructions

## 16.7 Further information

Before using this product, ensure that you read and understand its label

### MSDS information:

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, 1272/2008 and Annex I of the REACH regulation 453/2010.

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. Individuals handling this product should be informed under COSHH of the recommended safety precautions and should have access to this information. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Westland Horticulture Limited does not accept responsibility for damage caused by incorrect use of this information.

### Training and related advice:

This document contains important information to ensure the safe storage, handling and use of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to the end user and that all necessary training to enable the product to be used correctly has been given.

For further information please contact Westland Horticulture Ltd, 14 Granville Industrial Estate, Granville Road, Dungannon, County Tyrone, BT70 1NJ.