

**PROVADO ULTIMATE BUG KILLER READY TO USE**

1/9

Version 4 / GB
10200006521Revision Date: 31.07.2014
Print Date: 18.08.2014**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Trade name PROVADO ULTIMATE BUG KILLER READY TO USE
Product code (UVP) 06105211

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use Insecticide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer CropScience Limited
230 Cambridge Science Park
Milton Road
Cambridge
Cambridgeshire CB4 0WB
United Kingdom

Telephone +44(0)1223 226500

Telefax +44(0)1223 426240

Responsible Department Email: gardening.adviser@bayergarden.co.uk

1.4 Emergency telephone no.

Emergency telephone no. 0800-220876 (UK 24 hr)
+44(0)1635-563000 (Overseas 24 hr)

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Chronic aquatic toxicity: Category 3
H412 Harmful to aquatic life with long lasting effects.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

R52/53

2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Thiacloprid

Hazard statements

H412 Harmful to aquatic life with long lasting effects.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.


PROVADO ULTIMATE BUG KILLER READY TO USE

2/9

Version 4 / GB
102000006521Revision Date: 31.07.2014
Print Date: 18.08.2014

P102	Keep out of reach of children.
P260	Do not breathe spray.
P271	Use only outdoors or in a well-ventilated area.
P501	Dispose of contents/container to a household waste recycling centre as hazardous waste except for empty containers which can be disposed of by recycling. Contact your local council for details.

2.3 Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.2 Mixtures
Chemical nature
Any other liquids (AL)
Thiacloprid 0,15 g/l
Hazardous components
R-phrase(s) according to EC directive 67/548/EEC
Hazard statements according to Regulation (EC) No. 1907/2006

Name	CAS-No. / EC-No.	Classification		Conc. [%]
		EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	
Thiacloprid	111988-49-9 601-147-9	Carc.Cat.3 R40 T; R25 Xn; R20 N; R50/53	Acute Tox. 3, H301 Acute Tox. 4, H332 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	0.015

Further information

Thiacloprid	111988-49-9	M-Factor: 100 (acute)
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For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES
4.1 Description of first aid measures

Inhalation	Move to fresh air. Keep patient warm and at rest.
Skin contact	Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.
Eye contact	Remove contact lens and rinse eyes immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	DO NOT induce vomiting unless directed to do so by a physician or poison control center. Rinse out mouth and give water in small sips to drink. Keep patient warm and at rest.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

**PROVADO ULTIMATE BUG KILLER READY TO USE**

3/9

Version 4 / GB
102000006521Revision Date: 31.07.2014
Print Date: 18.08.2014

Treatment Treat symptomatically. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

5.2 Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

5.3 Advice for firefighters

Special protective equipment for fire-fighters In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Precautions Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.

6.2 Environmental precautions Do not allow to get into surface water, drains and ground water. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Keep in suitable, closed containers for disposal. Clean floors and contaminated objects with plenty of water. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling**



PROVADO ULTIMATE BUG KILLER READY TO USE

4/9

Version 4 / GB
102000006521Revision Date: 31.07.2014
Print Date: 18.08.2014

Advice on safe handling	No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation.
Advice on protection against fire and explosion	No special precautions required.
Hygiene measures	When using, do not eat, drink or smoke. Wash hands immediately after work, if necessary take a shower.
7.2 Conditions for safe storage, including any incompatibilities	
Requirements for storage areas and containers	Store in original container and out of the reach of children, preferably in a locked storage area. Keep away from direct sunlight. Protect from freezing. Keep containers tightly closed in a dry, cool and well-ventilated place.
Advice on common storage	Keep away from food, drink and animal feedingstuffs.
Suitable materials	HDPE (high density polyethylene)
7.3 Specific end uses	Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Thiacloprid	111988-49-9	0.56 mg/m ³ (TWA)		OES BCS*

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

8.2 Exposure controls

Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.

Personal protective equipment

In normal use conditions personal protective equipment is not deemed to be necessary. If there is a potential for excessive exposure the following applies:

Respiratory protection	Respiratory protection is not required under anticipated circumstances of exposure. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.
Hand protection	Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.
Eye protection	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
Skin and body protection	Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective

**PROVADO ULTIMATE BUG KILLER READY TO USE**

5/9

Version 4 / GB
102000006521Revision Date: 31.07.2014
Print Date: 18.08.2014

type suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Form	Liquid, slightly turbid
Colour	colourless
Odour	odourless
Boiling point/boiling range	102 °C
Flash point	Not relevant; aqueous solution
Ignition temperature	585 °C
Density	ca. 1.00 g/cm ³ at 20 °C
Water solubility	miscible
Partition coefficient: n-octanol/water	Thiacloprid: log Pow: 1.26 at 20 °C
Oxidizing properties	No oxidizing properties
9.2 Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity****Thermal decomposition** Stable under normal conditions.**10.2 Chemical stability** Stable under recommended storage conditions.**10.3 Possibility of hazardous reactions** No hazardous reactions when stored and handled according to prescribed instructions.**10.4 Conditions to avoid** Extremes of temperature and direct sunlight.**10.5 Incompatible materials** Store only in the original container.**10.6 Hazardous decomposition products** No decomposition products expected under normal conditions of use.**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Acute oral toxicity** LD50 (rat) > 2,000 mg/kg
Test conducted with a similar formulation.**Acute inhalation toxicity** LC50 (rat) > 4.63 mg/l
Exposure time: 4 h
Determined in the form of a respirable aerosol.
Highest attainable concentration.

**PROVADO ULTIMATE BUG KILLER READY TO USE**

6/9

Version 4 / GB
102000006521Revision Date: 31.07.2014
Print Date: 18.08.2014

Acute dermal toxicity	LD50 (rat) > 4,000 mg/kg Test conducted with a similar formulation.
Skin irritation	No skin irritation (rabbit)
Eye irritation	No eye irritation (rabbit)
Sensitisation	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test

Assessment repeated dose toxicity

Thiacloprid did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity

Thiacloprid was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Thiacloprid caused at high dose levels an increased incidence of tumours in rats in the following organ(s): uterus, thyroid.

Thiacloprid caused at high dose levels an increased incidence of tumours in mice in the following organ(s): ovaries. The tumours seen with Thiacloprid were caused through a non-genotoxic mechanism, which is not relevant at low doses. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions.

Assessment toxicity to reproduction

Thiacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. Thiacloprid caused difficulties in parturition in rats. The mechanism of action for this effect is not considered to be relevant to man.

Assessment developmental toxicity

Thiacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Thiacloprid are related to maternal toxicity.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity to fish	LC50 (Lepomis macrochirus (Bluegill sunfish)) 25.2 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient.
Toxicity to aquatic invertebrates	EC50 (Water flea (Daphnia magna)) >= 85.1 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient.
	EC50 (Chironomus riparius (non-biting midge)) 0.00218 mg/l Exposure time: 28 d The value mentioned relates to the active ingredient.
Toxicity to aquatic plants	IC50 (Desmodemus subspicatus) 96.7 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient.

12.2 Persistence and degradability

Biodegradability	Thiacloprid: not rapidly biodegradable
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**PROVADO ULTIMATE BUG KILLER READY TO USE**

7/9

Version 4 / GB
102000006521Revision Date: 31.07.2014
Print Date: 18.08.2014**Koc** Thiachlopid: Koc: 615**12.3 Bioaccumulative potential****Bioaccumulation** Thiachlopid:
Does not bioaccumulate.**12.4 Mobility in soil****Mobility in soil** Thiachlopid: Slightly mobile in soils**12.5 Results of PBT and vPvB assessment****PBT and vPvB assessment** Thiachlopid: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).**12.6 Other adverse effects****Additional ecological information** No other effects to be mentioned.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product** Do not empty into drains.
Dispose of unused product in its container at a household waste site (civic amenity site).
Contact your local council (local authority) for details.**Contaminated packaging** Dispose of empty container in the dustbin.
Follow advice on product label and/or leaflet.**Waste key for the unused product** **020108** agrochemical waste containing dangerous substances

SECTION 14: TRANSPORT INFORMATION**According to ADN/ADR/UK 'Carriage' Regulations/RID/IMDG/IATA not classified as dangerous goods.**

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

14.1 – 14.5 Not applicable.**14.6 Special precautions for user**

See sections 6 to 8 of this Safety Data Sheet.

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

No transport in bulk according to the IBC Code.

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****UK and Northern Ireland Regulatory References**

This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet



PROVADO ULTIMATE BUG KILLER READY TO USE

8/9

Version 4 / GB
102000006521

Revision Date: 31.07.2014
Print Date: 18.08.2014

are followed.

Transport

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348)
Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367)
Air Navigation Dangerous Goods Regulations 2002 (SI 2002 No 2786)

Supply and Use

Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)
Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009
Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677)
EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits
Control of Pesticide Regulations 1986
Dangerous Substances and Explosive Atmospheres Regulations 2002

Waste Treatment

Environmental Protection Act 1990, Part II
Environmental Protection (Duty of Care) Regulations 1991
The Waste Management Licensing Regulations 1994 (as amended)
Hazardous Waste Regulations 2005 (Replacing Special Waste Regulations 1996 as amended)
Landfill Directive
Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)
Water Resources Act 1991
Anti-Pollution Works Regulations 1999

Further information

WHO-classification: III (Slightly hazardous)

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: OTHER INFORMATION

Text of R-phrases mentioned in Section 3

R20	Harmful by inhalation.
R25	Toxic if swallowed.
R40	Limited evidence of a carcinogenic effect.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Text of the hazard statements mentioned in Section 3

H301	Toxic if swallowed.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

The above information is intended to give general health and safety guidance on the storage and transport of the product.

It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with.



PROVADO ULTIMATE BUG KILLER READY TO USE

9/9

Version 4 / GB
102000006521

Revision Date: 31.07.2014
Print Date: 18.08.2014

The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given.

The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate.

No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

Reason for Revision: Section 12. Ecological information. Safety Data Sheet according to Regulation (EU) No. 453/2010.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.