

**PROVADO LAWN GRUB KILLER**Version 4 / GB
1020000076761/10
Revision Date: 19.11.2012
Print Date: 15.01.2013**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**Trade name PROVADO LAWN GRUB KILLER
Product code (UVP) 05439280**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 sheetSupplier Bayer CropScience Limited
230 Cambridge Science Park
Milton Road
Cambridge
Cambridgeshire CB4 0WB
Great BritainTelephone +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 according to EU Directives 67/548/EEC or 1999/45/EC**

N Dangerous for the environment, R50/53

2.2 Label elements**Labelling according to specific UK regulations:**

The labelling information below is that which has been approved under 'The Control of Pesticides Regulations 1986' and/or 'Part III of the Food and Environment Protection Act 1985' and/or 'Plant Protection Product Regulations 1999' and any subsequent amendments and may differ from that indicated by any toxicological and/or other testing otherwise indicated in this 'Safety Data Sheet'. Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Imidacloprid

Symbol(s)



N Dangerous for the environment

R-phrases

R50/53

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

**PROVADO LAWN GRUB KILLER**Version 4 / GB
102000007676

2/10

Revision Date: 19.11.2012
Print Date: 15.01.2013

||| To avoid risks to man and the environment, comply with the instructions for use.

S-phrases(s)

||| S 2
||| S46

Keep out of the reach of children.
If swallowed, seek medical advice immediately and show this container or label.

2.3 Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2 Mixtures****Chemical nature**Water dispersible granules (WG)
Imidacloprid 50g/kg**Hazardous components**R-phrases(s) according to EC directive 67/548/EEC
Hazard statements according to Regulation (EC) No. 1907/2006

Name	CAS-No. / EC-No.	Classification		Concentration [%]
		EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	
Imidacloprid	138261-41-3 428-040-8	Xn; R22 N; R50/53	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	5.00
Polyether modified trisiloxane	134180-76-0	Xn; R20/21 Xi; R36 N; R51/53	Acute Tox. 4, H332 Acute Tox. 4, H312 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	> 0.10 - < 2.50
Methylene-linked condensation product of arylsulphonic, sodium salts	90387-57-8 291-331-1	R52/53	Aquatic Chronic 3, H412	> 1.00 - < 25.00
Kaolin	1332-58-7 310-194-1	Not classified	Not classified	> 1.00

Further information

Imidacloprid	138261-41-3	M-Factor: 10 (acute)
--------------	-------------	----------------------

For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES



PROVADO LAWN GRUB KILLER

Version 4 / GB
102000007676

3/10
Revision Date: 19.11.2012
Print Date: 15.01.2013

4.1 Description of first aid measures

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

Rinse immediately with plenty of water and seek medical advice. 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

If large amounts are ingested, the following symptoms may occur:
Dizziness, Abdominal pain, Nausea

4.3 Indication of any immediate medical attention and special treatment needed

Treatment

Initial treatment: symptomatic.

In the event of a mouthful or more being ingested, the following measures should be considered:

Monitor: respiratory and cardiac functions.

In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

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



PROVADO LAWN GRUB KILLER

Version 4 / GB
102000007676

4/10

Revision Date: 19.11.2012
Print Date: 15.01.2013

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation.
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

Sweep up or vacuum up spillage and collect in suitable container for disposal.
Clean floors and contaminated objects with plenty of water.

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

Advice on safe handling

No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.
Avoid dust formation.
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 containers tightly closed in a dry, cool and well-ventilated place.
Keep away from direct sunlight.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

7.3 Specific end uses

Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

**PROVADO LAWN GRUB KILLER**Version 4 / GB
102000007676

5/10

Revision Date: 19.11.2012

Print Date: 15.01.2013

Components	CAS-No.	Control parameters	Update	Basis
Imidacloprid	138261-41-3	0.7 mg/m ³ (TWA)		OES BCS*
Kaolin (Respirable dust.)	1332-58-7	2 mg/m ³ (TWA)	12 2011	EH40 WEL

*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	Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent. 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 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands 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 coverall and type 5 suit. If there is a risk of significant exposure, consider a higher protective 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	water-dispersible granules
Colour	light beige
Odour	weak, characteristic

**PROVADO LAWN GRUB KILLER**Version 4 / GB
1020000076766/10
Revision Date: 19.11.2012
Print Date: 15.01.2013

pH	8.0 - 8.5 at 1 % (23 °C) (deionized water)
Autoignition temperature	> 403 °C The product is not self-ignitable.
Water solubility	soluble
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive

9.2 Other information

Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

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) > 4,000 mg/kg Test conducted with a similar formulation.
Acute inhalation toxicity	During intended and foreseen applications, no respirable aerosol is formed.
Acute dermal toxicity	LD50 (rat) > 4,000 mg/kg Test conducted with a similar formulation.
Skin irritation	No skin irritation (rabbit) Test conducted with a similar formulation.
Eye irritation	No eye irritation (rabbit) Test conducted with a similar formulation.

**PROVADO LAWN GRUB KILLER**Version 4 / GB
1020000076767/10
Revision Date: 19.11.2012
Print Date: 15.01.2013

- Sensitisation** Non-sensitizing. (guinea pig)
OECD Test Guideline 406, Buehler test
Test conducted with a similar formulation.
- Assessment repeated dose toxicity**
Imidacloprid did not cause specific target organ toxicity in experimental animal studies.
- Assessment Mutagenicity**
Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.
- Assessment Carcinogenicity**
Imidacloprid was not carcinogenic in lifetime feeding studies in rats and mice.
- Assessment Toxicity to Reproduction**
Imidacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Imidacloprid is related to parental toxicity.
- Assessment developmental toxicity**
Imidacloprid caused developmental toxicity only at doses toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

- Toxicity to fish** LC50 (Rainbow trout (*Oncorhynchus mykiss*)) 211 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient imidacloprid.
- Toxicity to aquatic invertebrates** EC50 (Water flea (*Daphnia magna*)) 85 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient imidacloprid.
- LC50 (*Chironomus riparius* (non-biting midge)) 0.0552 mg/l
Exposure time: 24 h
The value mentioned relates to the active ingredient imidacloprid.
- Toxicity to aquatic plants** EC50 (*Desmodium subspicatus*) > 10 mg/l
Growth rate; Exposure time: 72 h
The value mentioned relates to the active ingredient imidacloprid.

12.2 Persistence and degradability

- Biodegradability** Not applicable for this mixture.

12.3 Bioaccumulative potential

- Bioaccumulation** Not applicable for this mixture.

12.4 Mobility in soil

- Mobility in soil** Not applicable for this mixture.

12.5 Results of PBT and vPvB assessment

**PROVADO LAWN GRUB KILLER**Version 4 / GB
102000007676

8/10

Revision Date: 19.11.2012
Print Date: 15.01.2013

Not relevant as no chemical safety report is necessary.

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**ADR/RID/ADN**

14.1 UN number	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90
Tunnel Code	E

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

IMDG

14.1 UN number	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Marine pollutant	YES

IATA

14.1 UN number	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

**PROVADO LAWN GRUB KILLER**Version 4 / GB
102000007676

9/10

Revision Date: 19.11.2012
Print Date: 15.01.2013

(IMIDACLOPRID MIXTURE)

14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES

UK 'Carriage' Regulations

14.1 UN number	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Emergency action code	2Z

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**

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

R20/21	Harmful by inhalation and in contact with skin.
R22	Harmful if swallowed.
R36	Irritating to eyes.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Text of the hazard statements mentioned in Section 3

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.



PROVADO LAWN GRUB KILLER

Version 4 / GB
102000007676

10/10
Revision Date: 19.11.2012
Print Date: 15.01.2013

H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful 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.

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: 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.