



## PROVADO UL BUG KILLER EW 12X30ML BOT GB

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Version 6 / EU  
102000013165Revision Date: 26.02.2014  
Print Date: 09.11.2015

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

**Trade name** PROVADO UL BUG KILLER EW 12X30ML BOT GB  
**Product code (UVP)** 05759284

#### 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 AG  
Alfred-Nobel-Straße 50  
40789 Monheim am Rhein  
Germany

**Telefax** +49(0)2173-38-7394

**Responsible Department** Product Safety and Specification Management  
+49(0)2173-38-3409 (during business hours only)  
Email: BCS-SDS@bayer.com

#### 1.4 Emergency telephone no.

**Emergency telephone no.** Global Incident Response Hotline (24h)  
+1 (760) 476-3964 (Company 3E for Bayer CropScience)

### 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.**

Flammable liquids: Category 3  
H226 Flammable liquid and vapour.

Acute aquatic toxicity: Category 1  
H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1  
H410 Very toxic to aquatic life with long lasting effects.

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

N Dangerous for the environment, R50/53

#### 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:**

- Deltamethrin



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H226	Flammable liquid and vapour.
H410	Very toxic to aquatic life with long lasting effects.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
EUH208	Contains alpha-hexylcinnamaldehyde, benzylsalicylate. May produce an allergic reaction.

**Precautionary statements**

P240	Ground/bond container and receiving equipment.
P280	Wear protective gloves/protective clothing/eye protection.
P501	Dispose of contents/container in accordance with local regulation.

**2.3 Other hazards**

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Chemical nature**

Emulsion, oil in water (EW)  
Deltamethrin 15 g/l

**Hazardous components**

R-phrases 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	
Deltamethrin	52918-63-5 258-256-6	T; R23/25 N; R50/53	Acute Tox. 3, H331 Acute Tox. 3, H301 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	1,50
Benzyl benzoate	120-51-4 204-402-9	Xn; R22 N; R51/53	Acute Tox. 4, H302 Aquatic Chronic 2, H411	> 2,50 - < 25,00
Cyclohexanone	108-94-1 203-631-1	R10 Xn; R20	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 Flam. Liq. 3, H226 Acute Tox. 4, H332	> 1,00 - < 25,00
Isotridecanol, ethoxylated	9043-30-5 500-027-2	Xn; R22 Xi; R41	Acute Tox. 4, H302 Eye Dam. 1, H318	> 1,00 - < 25,00
Benzyl salicylate	118-58-1 204-262-9	Xi; R43 N; R51/53	Skin Sens. 1, H317 Aquatic Chronic 2, H411	> 0,10 - < 2,50
Linalyl acetate	115-95-7 204-116-4	N; R51/53	Aquatic Chronic 2, H411	> 0,10 - < 2,50

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.alpha-Hexylcinnamaldehyd	101-86-0 202-983-3	Xi; R43 N; R50/53	Skin Sens. 1, H317 Aquatic Chronic 1, H410	> 0,10 - < 0,25
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**Further information**

Deltamethrin	52918-63-5	M-Factor: 1.000.000 (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**

<b>General advice</b>	Remove contaminated clothing immediately and dispose of safely.
<b>Inhalation</b>	Move the victim to fresh air and keep at rest. Call a physician or poison control center immediately.
<b>Skin contact</b>	Immediately wash with plenty of soap and water for at least 15 minutes. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

**4.2 Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Local:, Skin and eye paraesthesia which may be severe, Usually transient with resolution within 24 hours, Skin, eye and mucous membrane irritation, Cough, Sneezing  Systemic:, Discomfort in the chest, Tachycardia, Hypotension, Nausea, Abdominal pain, Diarrhoea, Vomiting, Dizziness, Blurred vision, Headache, Anorexia, Somnolence, Coma, Convulsions, Tremors, Prostration, Airway hyperreaction, Pulmonary oedema, Palpitation, Muscular fasciculation, Apathy
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**4.3 Indication of any immediate medical attention and special treatment needed**

<b>Risks</b>	This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.
<b>Treatment</b>	Local treatment: Initial treatment: symptomatic.  Systemic treatment: Initial treatment: symptomatic. 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. Keep respiratory tract clear. Oxygen or artificial respiration if needed. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. If not

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effective, phenobarbital may be used. Contraindication: atropine.  
Contraindication: derivatives of adrenaline. There is no specific antidote.  
Recovery is spontaneous and without sequelae.

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**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.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures****Precautions** Keep people away from and upwind of spill/leak. 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.**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Clean floors and contaminated objects with plenty of water.**Additional advice** Check also for any local site procedures.**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.

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**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. Ensure adequate ventilation.**Advice on protection against fire and explosion** Keep away from heat and sources of ignition. Vapours may form explosive mixture with air. Take measures to prevent the build up of electrostatic charge. Use only in explosion-proof areas.

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**Hygiene measures** When using, do not eat, drink or smoke. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove soiled clothing immediately and clean thoroughly before using again. Contaminated work clothing should not be allowed out of the workplace. 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 a place accessible by authorized persons only. Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Suitable materials** Combination of sheet metal and 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
Deltamethrin	52918-63-5	0,02 mg/m <sup>3</sup> (TWA)		OES BCS*
Cyclohexanone	108-94-1	81,6 mg/m <sup>3</sup> /20 ppm (STEL)	12 2009	EU ELV
Cyclohexanone	108-94-1	40,8 mg/m <sup>3</sup> /10 ppm (TWA)	12 2009	EU ELV

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

**8.2 Exposure controls****Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**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 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.

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

<b>Form</b>	Liquid
<b>Colour</b>	white
<b>Odour</b>	weak, characteristic
<b>pH</b>	2,0 - 4,0 at 100 % (23 °C)
<b>Flash point</b>	56,5 °C
<b>Density</b>	ca. 1,02 g/cm <sup>3</sup> at 20 °C
<b>Water solubility</b>	miscible
<b>Partition coefficient: n-octanol/water</b>	Deltamethrin: log Pow: 6,4 at 25 °C
<b>Viscosity, dynamic</b>	50 - 120 mPa.s at 20 °C Velocity gradient 20 /s 50 - 100 mPa.s at 20 °C Velocity gradient 100 /s

**9.2 Other information** Further safety related physical-chemical data are not known.

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**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.

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**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Acute oral toxicity** LD50 (rat) > 2.000 mg/kg**Acute dermal toxicity** LD50 (rat) > 2.000 mg/kg**Skin irritation** Slight irritant effect - does not require labelling. (rabbit)**Eye irritation** Slight irritant effect - does not require labelling. (rabbit)**Sensitisation** Non-sensitizing. (guinea pig)  
OECD Test Guideline 406, Buehler test  
Non-sensitizing. (mouse)  
OECD Test Guideline 429, local lymph node assay (LLNA)

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Deltamethrin caused neurobehavioral effects and/or neuropathological changes in animal studies. The toxic effects of Deltamethrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

**Assessment Mutagenicity**

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

**Assessment Carcinogenicity**

Deltamethrin was not carcinogenic in lifetime feeding studies in rats and mice.

**Assessment toxicity to reproduction**

Deltamethrin did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity**

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

**Further information**

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

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**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

**Toxicity to fish** LC50 (Rainbow trout (*Oncorhynchus mykiss*)) 0,014 mg/l  
Exposure time: 96 h

**Toxicity to aquatic invertebrates** EC50 (Water flea (*Daphnia magna*)) 0,0013 mg/l  
Exposure time: 48 h

**Toxicity to aquatic plants** EC50 (Algae) 8,14 mg/l  
Growth rate; Exposure time: 96 h  
EC50 (Algae) 2,96 mg/l  
Biomass; Exposure time: 72 h

**12.2 Persistence and degradability**

**Biodegradability** Deltamethrin:  
not rapidly biodegradable

**Koc** Deltamethrin: Koc: 10240000

**12.3 Bioaccumulative potential**

**Bioaccumulation** Deltamethrin: Bioconcentration factor (BCF) 1.400  
Does not bioaccumulate.

**12.4 Mobility in soil**

**Mobility in soil** Deltamethrin: Immobile in soil

**12.5 Results of PBT and vPvB assessment**

Not relevant as no chemical safety report is necessary.

**PBT and vPvB assessment** Deltamethrin: 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).

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**Additional ecological information** No further ecological information is available.

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

**Product** In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

**Contaminated packaging** Triple rinse containers.  
Do not re-use empty containers.  
Not completely emptied packagings should be disposed of as hazardous waste.

**Waste key for the unused product** **020108** agrochemical waste containing dangerous substances

**SECTION 14: TRANSPORT INFORMATION****ADR/RID/ADN**

14.1 UN number	<b>1993</b>
14.2 Proper shipping name	FLAMMABLE LIQUID, N.O.S. (DELTAMETHRIN, CYCLOHEXANONE SOLUTION)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	30
Tunnel Code	D/E
Special Provision	640E

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	<b>1993</b>
14.2 Proper shipping name	FLAMMABLE LIQUID, N.O.S. (DELTAMETHRIN, CYCLOHEXANONE SOLUTION)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Marine pollutant	YES

**IATA**

14.1 UN number	<b>1993</b>
14.2 Proper shipping name	FLAMMABLE LIQUID, N.O.S. (DELTAMETHRIN, CYCLOHEXANONE SOLUTION )
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environm. Hazardous Mark	NO

**14.6 Special precautions for user**





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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.

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## 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.

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## SECTION 16: OTHER INFORMATION

### Text of R-phrases mentioned in Section 3

R10	Flammable.
R20	Harmful by inhalation.
R22	Harmful if swallowed.
R23/25	Toxic by inhalation and if swallowed.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
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.

### Text of the hazard statements mentioned in Section 3

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 453/2010 amending Regulation (EU) No 1907/2006 (and any subsequent amendments). This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

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