

**PRO CONTROL FIK 21317 48X0,4L GB**Version 2 / GB  
1020000025201/10  
Revision Date: 02.08.2006  
Print Date: 03.08.2006**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name PRO CONTROL FIK 21317 48X0,4L GB  
Product code (UVP) 05938260  
Usage insecticide  
Company Bayer Environmental Science  
230 Cambridge Science Park  
Milton Road  
Cambridge  
Cambridgeshire CB4 0WB  
Great Britain

Telephone +44(0)1223 226500  
Telefax +44(0)1223 426240  
Emergency telephone number 0800-220876 (UK 24 hr)  
+44(0)1603-242424 (Overseas 24 hr)

**2. COMPOSITION/INFORMATION ON INGREDIENTS****Chemical nature**

Aerosol dispenser (AE)  
Bioallethrin/Permethrin/PBO 0.20:0.068:0.50 %w/w

**Hazardous components**

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrases(s)	Concentration [%]
Bioallethrin	584-79-2 209-542-4	Xn, N	R20/22, R50/53	0.20
Permethrin	52645-53-1 258-067-9	Xn, N	R20/22, R43, R50/53	0.068
Piperonyl butoxide	51-03-6 200-076-7	N	R50/53	0.50
Odourless kerosine	64742-47-8 265-149-8	Xn	R65, R66	> 25.00 - < 50.00
Butane	106-97-8 203-448-7	F+	R12	> 25.00 - < 50.00

**3. HAZARDS IDENTIFICATION****Risk advice to man and the environment**

Pressurised container, heating will cause pressure rise with a risk of bursting.  
Extremely flammable.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Repeated exposure may cause skin dryness or cracking.

**4. FIRST AID MEASURES**



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**General advice**

Remove contaminated clothing immediately and dispose of safely.

**Inhalation**

If abnormal over-exposure and inhalation of the aerosol occurs, the following advice is applicable. Move to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.

**Skin contact**

Wash off immediately with soap and plenty of water. After skin contact: Apply Vitamin E cream or a simple body milk. If symptoms persist, call a physician.

**Eye contact**

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Ingestion**

Ingestion of the aerosol spray is unlikely. However, if liquid contents are ingested, the following advice is applicable. Do NOT induce vomiting. Keep at rest. Obtain medical attention. Risk of product entering the lungs on vomiting after ingestion.

**Notes to Physician**

**Symptoms**

skin and eye paraesthesia which may be severe, Inhalation may provoke the following symptoms:, irritation, The product causes irritation of eyes, skin and mucous membranes.

**Symptoms**

Systemic:, excitement, gastrointestinal discomfort, dizziness, headache, apathy, nausea, vomiting, muscular fasciculation, unconsciousness

**Risks**

This product contains a pyrethroid.  
Must NOT be confused with organophosphorus compounds!

**Treatment**

Local treatment:  
Initial treatment should be symptomatic and supportive.  
After eye contact: Instillation of local anaesthetic drops e.g. 1% Amethocaine Hydrochloride eye drops. Give Analgesics as necessary.

**Treatment**

Systemic treatment:  
Endotracheal intubation and gastric lavage, followed by administration of charcoal.  
Monitoring of respiratory and cardiac functions.  
ECG - monitoring (Electrocardiogram).  
Check for pulmonary oedema in event of inhalation.  
Keep airway clear, administer artificial respiration if necessary.  
Against convulsions: give diazepam. For adults 5-10 mg intravenously as necessary until fully sedated; for children 2.5 mg i.v.  
There is no specific antidote.  
Contraindication: atropine.  
Contraindication: derivatives of adrenaline.

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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

water spray  
alcohol-resistant foam



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dry powder  
carbon dioxide (CO<sub>2</sub>)

**Extinguishing media which must not be used for safety reasons**

high volume water jet

**Specific hazards during fire fighting**

The product is extremely flammable.  
Product is contained in a pressurised container which may explode on heating.  
In case of fire the evolution of dangerous gases is possible.

**Special protective equipment for fire-fighters**

In the event of fire and/or explosion do not breathe fumes.  
Wear self contained breathing apparatus for fire fighting if necessary.

**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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**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions**

Keep people away from and upwind of spill/leak.  
Consider the need for evacuation.  
Avoid contact with spilled product or contaminated surfaces.  
Ensure adequate ventilation.  
When dealing with a spillage do not eat, drink or smoke.

**Environmental Precautions**

Do not discharge into the drains/surface water/groundwater.  
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).

**Methods for Cleaning Up**

The nature of this product, when contained in commercial packs, makes spillage unlikely.  
However, if significant amounts are spilled then the following advice is applicable.  
Take up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material).  
Transfer collected material to heavy duty plastic drums and keep safe for disposal.  
Clean floors and contaminated objects with plenty of water.

**Additional Advice**

Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.  
Check also for any local site procedures.

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**7. HANDLING AND STORAGE**

**Handling**

Advice on safe handling

No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.  
Use only in area provided with appropriate exhaust ventilation.



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Advice on protection against fire and explosion  
The product is extremely flammable.  
Vapours may form explosive mixture with air.  
Do not spray on a naked flame or any other incandescent material.

**Storage**

Requirements for storage areas and containers  
Keep container tightly closed in a dry and well-ventilated place.  
Store in a place accessible by authorized persons only.  
Keep away from direct sunlight.  
Protect against frost.

Advice on common storage  
Keep away from food, drink and animal feedingstuffs.

Storage stability  
Storage temperature 0 - 30 °C

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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.

**Components with workplace control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Butane	106-97-8	1,450 mg/m <sup>3</sup> / 600 ppm (TWA)	2005	EH40 WEL
Butane	106-97-8	1,810 mg/m <sup>3</sup> / 750 ppm (STEL)	2005	EH40 WEL

**Additional Advice**

Observe: Exposure Limits In Air, Gp1: 1000mg/m<sup>3</sup> / 200 ppm (aromatic-free or de-aromatised hydrocarbon mixes with < 1% aromatics < 5% n-hexane, < 25% cyclo/Isohexane TRGS 901 No. 72).

**Personal protective equipment**

**Respiratory Protection**

Personal protective equipment is not normally required when using the aerosol. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered.  
Wear respirator conforming to EN149FFP1.  
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**

Personal protective equipment is not normally required when using the aerosol. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered.  
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,

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drinking, smoking or using the toilet.

Eye protection	Personal protective equipment is not normally required when using the aerosol. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered. Wear goggles conforming to EN166 (Field of Use 5 or equivalent).
Skin and body protection	Personal protective equipment is not normally required when using the aerosol. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered. Wear standard coverall and type 6 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.
Hygiene measures	When using, do not eat, drink or smoke. Remove soiled clothing immediately. Remove soaked protective clothing immediately. Clean hands and face at work intervals and after work. Work in an adequately ventilated room.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form aerosol

**Safety data**Flash point > 75 °C  
Information refers to the solvent.Flash point ca. -104 °C  
The value mentioned relates to the aerosol propellant.Flash point ca. 65 °C  
Information based on main aerosol concentrate.Ignition temperature 230 °C  
The data relate to the solvent.Ignition temperature 430 °C  
The value mentioned relates to the aerosol propellant.Upper explosion limit 13.0 %(V)  
The data relate to the solvent.Upper explosion limit 8.4 %(V)  
The value mentioned relates to the aerosol propellant.Lower explosion limit 0.6 %(V)  
The data relate to the solvent.

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Lower explosion limit	1.8 %(V) The value mentioned relates to the aerosol propellant.
Relative vapour density	4.5 The data relate to the solvent.
Relative vapour density	2.1 The value mentioned relates to the aerosol propellant.
Other Information	The product is extremely flammable.

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**10. STABILITY AND REACTIVITY**

Conditions to Avoid	Extremes of temperature and direct sunlight.
Materials to avoid	None.
Thermal decomposition	Fire or intense heat may cause violent rupture of packages.
Hazardous Reactions	No hazardous reactions when stored and handled according to prescribed instructions. Stable under recommended storage conditions.

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**11. TOXICOLOGICAL INFORMATION**

Acute Oral Toxicity	LD50 (rat) > 2,000 mg/kg Information given is based on data on the components and the toxicology of similar products.
Acute Inhalation Toxicity	LC50 (rat) > 138 mg/l Exposure time: 4 h
Acute Dermal Toxicity	LD50 (rat) > 2,000 mg/kg Information given is based on data on the components and the toxicology of similar products.
Skin Irritation	No skin irritation. (rabbit) Information given is based on data on the components and the toxicology of similar products.
Eye Irritation	No eye irritation. (rabbit) Information given is based on data on the components and the toxicology of similar products.
Sensitization	Non-sensitizing. (guinea pig) Information given is based on data on the components and the toxicology of similar products.

## 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). When inhaled in high concentration, the solvent vapours cause a narcotic effect.

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**12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)**

Bioaccumulation                      Lepomis macrochirus (Bluegill sunfish)  
Bioconcentration factor (BCF): 260  
The value mentioned relates to the active ingredient piperonyl butoxide.

**Ecotoxicity effects**

Toxicity to Fish                      LC50 (Salmon) 0.0094 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient bioallethrin.

Toxicity to Fish                      LC50 (Guppy (Poecilia reticulata)) 0.0076 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient permethrin.

Toxicity to Fish                      LC50 (Cyprinodon variegatus (sheepshead minnow)) 3.94 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient piperonyl butoxide.

Toxicity to daphnia                      EC50 (Water flea (Daphnia magna)) 0.0356 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient bioallethrin.

Toxicity to daphnia                      EC50 (Water flea (Daphnia magna)) 0.00017 mg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient permethrin.

Toxicity to daphnia                      EC50 (Water flea (Daphnia magna)) 0.51 mg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient piperonyl butoxide.

Toxicity to algae                      EC50 (Selenastrum capricornutum) 0.497 mg/l  
Exposure time: 72 h  
The value mentioned relates to the active ingredient permethrin.

Toxicity to algae                      EC50 (Algae) > 9.1 mg/l  
Exposure time: 72 h  
The value mentioned relates to the active ingredient piperonyl butoxide.

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**13. DISPOSAL CONSIDERATIONS****Product**

Disposal of any liquid product that is no longer contained in the aerosol container would usually be by incineration in an appropriately licensed commercial incinerator.

Advice may be obtained from the local waste regulation authority (part of the Environment



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Agency in the UK).

**Contaminated packaging**

Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.

Ensure aerosol container is empty before disposal.

Not completely emptied packagings should be disposed of as hazardous waste.

**Waste key for the unused product**

020108 agrochemical waste containing dangerous substances

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**14. TRANSPORT INFORMATION**

**ADR/RID/ADNR**

UN-No	<b>1950</b>
Labels	2.1
Packaging group	
Hazard no.	
Description of the goods	UN 1950 AEROSOLS

**IMDG**

UN-No	<b>1950</b>
Class	2.1
Packaging group	
EmS	F-D , S-U
Marine pollutant	Marine pollutant
Description of the goods	AEROSOLS

**IATA**

UN-No	<b>1950</b>
Class	2.1
Packaging group	
Description of the goods	AEROSOLS, FLAMMABLE

**UK 'Carriage' Regulations**

UN-No	<b>1950</b>
Labels	2.1
Packaging group	
Hazard no.	
Description of the goods	UN 1950 AEROSOLS

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**15. REGULATORY INFORMATION**

**This product has been classified in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3 and any subsequent amendments.**

Classification:

Labelling according to EC Directives

Hazardous components which must be listed on the label:

- Bioallethrin
- Permethrin
- Piperonyl butoxide

Symbol(s)

F+ Extremely flammable



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Xn	Harmful
R-phrases(s)	
R12	Extremely flammable.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R66	Repeated exposure may cause skin dryness or cracking.
S-phrases(s)	
S 2	Keep out of the reach of children.
S16	Keep away from sources of ignition - No smoking.
S23	Do not breathe gas/fumes/vapour/spray.
S35	This material and its container must be disposed of in a safe way.
S51	Use only in well-ventilated areas.
S57	Use appropriate container to avoid environmental contamination.

**CLASSIFICATION 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'.

Symbol(s)	
F+	Extremely flammable
Xn	Harmful
R-phrases(s)	
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
Exceptional labelling	
	To avoid risks to man and the environment, comply with the instructions for use.
Further information	
	WHO-classification: II (Moderately hazardous)

**16. OTHER INFORMATION****Further information**

Text of R phrases mentioned in Section 2:

R12	Extremely flammable.
R20/22	Harmful by inhalation and if swallowed.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.

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.



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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.

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