

**PRO CONTROL FIK 21317 48X0,4L GB**Version 2 / GB
1020000025201/10
Revision Date: 22.12.2003
Print Date: 22.12.2003**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING****Product information**

Trade name PRO CONTROL FIK 21317 48X0,4L GB
Product code (UVP) 05938260
Product code AE F032639 01 AE01 A1
Product code (EXP) D319
Specification 21317

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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	R22	0.068
Piperonyl butoxide	51-03-6 200-076-7	N	R50/53	0.50
Odourless Kerosine	64742-47-8	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 liquefied gas.
Harmful 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, soaked clothing immediately and dispose of safely.

Inhalation

If abnormal over-exposure and inhalation of the aerosol occurs, the following advice is applicable. Move the patient to fresh air and keep 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 simple toilet milks. When symptoms persist or in all cases of doubt seek medical advice.

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.

Notes to physician

Symptoms

Local:, After skin contact: paresthesia (local), May cause skin and eye irritation., Inhalation may provoke the following symptoms:, irritation

Symptoms

Systemic:, excitement, gastrointestinal discomfort, tremor, Dizziness, headache, listlessness, nausea and vomiting, epigastric pain, muscular fasciculation of limbs, unconsciousness, convulsions and coma (very high doses).

Risks

This product/preparation contains a pyrethroid.
Must NOT be confused with organophosphorus compounds!
Risk of product entering the lungs on vomiting after ingestion.

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 should be done and gastric lavage performed, 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 antidote.
Contraindication: atropine
Contraindication: derivatives of adrenaline

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

water spray



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alcohol-resistant foam
dry powder
carbon dioxide (CO₂)

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 bunding area with sand or earth.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Consider the need for evacuation.
Ventilate the spillage area.
Avoid contact with spilled product or contaminated surfaces.
When dealing with a spillage do not eat, drink or smoke.

Environmental precautions

Keep people and animals away.
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, earth or a proprietary absorbent material).
Transfer collected material to heavy duty plastic drums and keep safe for disposal.
Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations

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.

7. HANDLING AND STORAGE

Handling

Advice on safe handling

No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.
Provide good ventilation of working area (local exhaust ventilation if necessary).



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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.

Further information on storage conditions

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

Suitable materials

Keep in original packaging, tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to COSHH assessment (Control of substances Hazardous to Health Regulations 1999 as amended). Engineering controls should be used in preference to personal protective equipment wherever practicable.

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
Butane	106-97-8	1,450 mg/m ³ (TWA)	2001	EH40 OES
		1,810 mg/m ³ (STEL)	2001	EH40 OES

Additional advice

Observe: Exposure Limits In Air, Gp1 1000mg/m³/200ppm. (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. Short term: filter apparatus, Filter A
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. Chemical resistant gloves PVC gloves nitrile gloves
Eye protection	Personal protective equipment is not normally required when using



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	the aerosol. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered. goggles safety glasses
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. Light protective clothing, PVC PVC boots
Hygiene measures	When using, do not eat, drink or smoke. Remove soiled clothing immediately. Remove soaked 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
Colour	colourless to slightly yellow
Odour	slight

Safety data

Flash point	> 75 °C closed cup Information applies to the solvent.
Flash point	ca. -104 °C closed cup The value mentioned relates to the aerosol propellant.
Flash point	ca. 65 °C closed cup 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.
Vapour pressure	0.67 hPa at 20 °C The data relate to the solvent
Vapour pressure	2,140 - 8,530 hPa at 21.1 °C 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.
Water solubility	immiscible
Partition coefficient (n-octanol/water)	log Pow: 5.95 The value mentioned relates to the active ingredient permethrin.
Partition coefficient (n-octanol/water)	log Pow: 4.75 The value mentioned relates to the active ingredient piperonyl butoxide.
Other information	The product is extremely flammable.

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.

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



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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 larger quantities, the solvent vapours cause a narcotic effect.

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.
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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 (Trout) 0.0097 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient Bioallethrin.
Toxicity to fish	LC50 (Channel catfish) 0.027 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 (Bluegill sunfish) 5.37 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient piperonyl butoxide.
Toxicity to fish	LC50 (Rainbow trout (Oncorhynchus mykiss)) 6.12 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient piperonyl butoxide.



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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: 48 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 other organisms	LD50 (Bobwhite quail) 2,030 mg/kg The value mentioned relates to the active ingredient Bioallethrin.
Toxicity to other organisms	LD50 (Japanese quail) > 13,500 mg/kg The value mentioned relates to the active ingredient permethrin.
Toxicity to other organisms	LD50 (Bobwhite quail) > 2,250 mg/kg The value mentioned relates to the active ingredient piperonyl butoxide.

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 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.
Packaging that cannot be cleaned should be disposed of as product waste.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

14. TRANSPORT INFORMATION

ADR/RID/ADNR

UN-No	1950
Labels	2.1

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Packaging group
Hazard no.
Description of the goods UN 1950 AEROSOLS

IMDG

UN-No **1950**
Class 2.1
Packaging group
Description of the goods AEROSOLS

IATA

UN-No **1950**
Class 2.1
Packaging group
Description of the goods AEROSOLS, FLAMMABLE

CDG CPL

UN-No **1950**
Class **2.1**
Proper shipping name **AEROSOLS**

15. REGULATORY INFORMATION

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

Hazardous components which must be listed on the label:

- Bioallethrin
- Permethrin
- Piperonyl butoxide

Symbol(s)

F+ Extremely flammable
Xn Harmful

R-phrases(s)

R12 Extremely flammable.
R52/53 Harmful 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)

S35 This material and its container must be disposed of in a safe way.

16. OTHER INFORMATION**Further information**

Text of R phrases mentioned in Section 2:

R12 Extremely flammable.
R20/22 Harmful by inhalation and if swallowed.
R22 Harmful if swallowed.
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.



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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.

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