



## MINI SMOKE GENERATOR 6X35PC BOX GB

Version 3 / GB  
102000002531

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Revision Date: 23.02.2006  
Print Date: 14.06.2006

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### Product information

Trade name MINI SMOKE GENERATOR 6X35PC BOX GB  
Product code (UVP) 05938406  
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

Smoke generator (FU)  
Permethrin 25/75 13.5% w/w

#### Hazardous components

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrases(s)	Concentration [%]
Permethrin	52645-53-1 258-067-9	Xn, N	R20/22, R43, R50/53	13.50
Potassium chlorate	3811-04-9 223-289-7	O, Xn, N	R 9, R20/22, R51/53	> 5.00 - < 25.00
Magnesium carbonate	546-93-0 208-915-9			> 25.00 - < 50.00

### 3. HAZARDS IDENTIFICATION

#### Risk advice to man and the environment

Harmful if swallowed.  
Irritating to eyes and respiratory system.  
May cause sensitization by skin contact.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Ignites readily. Product burns without a flame to give a dense white harmful smoke.

### 4. FIRST AID MEASURES

#### General advice

Remove contaminated clothing immediately and dispose of safely.



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**Inhalation**

If symptoms persist, call a physician. Move to fresh air. Keep patient warm and at rest.

**Skin contact**

Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. When symptoms persist or in all cases of doubt seek medical advice. After skin contact: Apply Vitamin E cream or a simple body milk.

**Eye contact**

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

**Ingestion**

Obtain medical attention. Do not induce vomiting. Keep at rest. Rinse mouth.

**Notes to Physician**

**Symptoms**

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

**Symptoms**

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

**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 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 specific antidote.  
Contraindication: atropine.  
Contraindication: derivatives of adrenaline.  
Recovery: spontaneous.

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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

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

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

high volume water jet

**Specific hazards during fire fighting**



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In case of fire the evolution of dangerous gases is possible.  
Contains potassium chlorate which is classified as an oxidising agent.  
This will assist combustion in a fire situation.

### 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.  
Avoid dust formation.  
Avoid contact with spilled product or contaminated surfaces.  
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.  
Sweep up or preferably vacuum up spillage using equipment fitted with high efficiency final filter.  
Transfer collected material to heavy duty plastic drums and keep safe for disposal.  
Clean contaminated floors and objects thoroughly, 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.

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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.  
Avoid dust formation.  
Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion  
During processing, dust may form explosive mixture in air.

### Storage

Requirements for storage areas and containers  
Keep container tightly closed in a dry and well-ventilated place.



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Store in a place accessible by authorized persons only.  
Keep away from heat.  
Keep away from direct sunlight.  
Protect against moisture.

### Advice on common storage

Keep away from food, drink and animal feedingstuffs.

### Storage stability

Storage temperature 0 - 30 °C

### Suitable materials

Store in original container.

## 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
Magnesium carbonate (Inhalable dust.)	546-93-0	10 mg/m <sup>3</sup> (TWA)	2005	EH40 WEL
Magnesium carbonate (Respirable dust.)	546-93-0	4 mg/m <sup>3</sup> (TWA)	2005	EH40 WEL

### Personal protective equipment

Respiratory Protection	No personal respiratory protective equipment normally required. 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. In the case of hazardous fumes, wear self contained breathing apparatus.
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 3 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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### 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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	powder
Colour	off-white
Odour	characteristic

### Safety data

Ignition temperature	> 130 °C
Oxidizing properties	Contains potassium chlorate which is classified as an oxidising agent.
Other Information	Combustible solid product.

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## 10. STABILITY AND REACTIVITY

Conditions to Avoid	Extremes of temperature and direct sunlight.
Materials to avoid	None.
Hazardous Reactions	No hazardous reactions when stored and handled according to prescribed instructions. Stable under normal conditions.

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## 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD50 (rat) ca. 2,000 mg/kg Information given is based on data on the components and the toxicology of similar products.
Acute Inhalation Toxicity	LC50 (rat) > 4.2 mg/l Exposure time: 4 h Irritating to respiratory system.
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)
Eye Irritation	Irritating to eyes. (rabbit)



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Sensitization 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).

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

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 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 algae EC50 (*Selenastrum capricornutum*) 0.497 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient permethrin.

## 13. DISPOSAL CONSIDERATIONS

### Product

In accordance with current regulations may be taken to waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority.  
Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

### Contaminated packaging

Do not rinse container.  
Dispose of empty and cleaned packaging safely.  
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	3077
Labels	9
Packaging group	III
Hazard no.	90
Description of the goods	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE)

### IMDG

UN-No	3077
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Class	9
Packaging group	III
EmS	F-A , S-F
Marine pollutant	Marine pollutant
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE )

**IATA**

UN-No	<b>3077</b>
Class	9
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE )

**UK 'Carriage' Regulations**

UN-No	<b>3077</b>
Labels	9
Packaging group	III
Hazard no.	90
Emergency action code	2Z
Description of the goods	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE)

**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 EEC Directive

Hazardous components which must be listed on the label:

- Permethrin
- Potassium chlorate

## Symbol(s)

Xn	Harmful
N	Dangerous for the environment

## R-phrases)

R22	Harmful if swallowed.
R36/37	Irritating to eyes and respiratory system.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## S-phrases(s)

S24	Avoid contact with skin.
S35	This material and its container must be disposed of in a safe way.
S37	Wear suitable gloves.
S57	Use appropriate container to avoid environmental contamination.

## Exceptional labelling

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



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Further information  
WHO-classification: III (Slightly hazardous)

### 16. OTHER INFORMATION

#### Further information

Text of R phrases mentioned in Section 2:

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.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 9	Explosive when mixed with combustible material.

Smoke generators are ready to use products contained in a plastic or aluminium container.

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