

**//MAXI SMOKE GENERATOR 21331 6X12PC EX**Version 2 / GB
1020000025321/8
Revision Date: 01.04.2008
Print Date: 04.04.2008**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name //MAXI SMOKE GENERATOR 21331 6X12PC EX
Product code (UVP) 05938414
Usage Insecticide
Company Bayer Environmental Science
230 Cambridge Science Park
Milton Road
Cambridge
Cambridgeshire CB4 0WB
Great Britain

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Responsible Department Email: ukinfo@bayercropscience.com

Emergency telephone number 0800-220876 (UK 24 hr)
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2. 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.

3. 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	> 2.50 - < 25.00
Talc	14807-96-6 238-877-9			> 1.00

For the full text of the R phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES



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Inhalation

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

Skin contact

Take off contaminated clothing and shoes immediately. 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

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. Get medical attention if irritation develops and persists.

Ingestion

Rinse out mouth and give water in small sips to drink. If symptoms persist, call a physician. Ingest activated charcoal. Induce vomiting only, if: 1. patient is fully conscious, 2. medical aid is not readily available, 3. a significant amount (more than a mouthful) has been ingested and 4. time since ingestion is less than 1 hour. (Vomit should not get into the respiratory tract.)

Notes to Physician

Symptoms

Local:, skin and eye paraesthesia which may be severe, Usually transient with resolution within 24 hours., eye and mucous membrane irritation, cough

Symptoms

Systemic:, discomfort in the chest, bronchial hypersecretion, pulmonary oedema, tachycardia, low blood pressure, Palpitation, Vomiting, Diarrhoea, Abdominal pain, Nausea, Salivation, dizziness, blurred vision, headache, apathy, anorexia, somnolence, Coma, Convulsions, Tremors, ataxia, muscular fasciculation

Risks

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

Treatment

Local treatment:
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 and sodium sulphate.
Monitoring of respiratory and cardiac functions.
Anti-convulsive therapy: Diazepam i.v. is the remedy of choice; barbiturates, e.g. phenobarbital and calcium gluconate, may also be used.
There is no specific antidote.
Contraindication: derivatives of adrenaline.
Contraindication: atropine.
Spontaneous recovery.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Extinguishing media which should not be used for safety reasons



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High volume water jet

Specific hazards during fire fighting

Dangerous gases are evolved in the event of a fire.
Contains potassium chlorate which is classified as an oxidising agent.

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.

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 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).

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 vacuum up spillage and collect in suitable container 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.

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

Dust may form explosive mixtures with air.

Storage

Requirements for storage areas and containers

Store in a place accessible by authorized persons only.



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Keep away from direct sunlight.
Keep containers tightly closed in a dry, cool and well-ventilated place.

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

Temperature tolerance -10 °C to 40 °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
Permethrin	52645-53-1	10 mg/m3		OES BCS*
Talc (Respirable dust.)	14807-96-6	1 mg/m3 (TWA)	2007	EH40 WEL

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

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 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.

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.

Hygiene measures

When using, do not eat, drink or smoke.
Remove soiled clothing immediately and clean thoroughly before using again.
Wash hands immediately after work, if necessary take a shower.

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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.

10. STABILITY AND REACTIVITY

Conditions to Avoid	Extremes of temperature and direct sunlight.
Hazardous Reactions	No hazardous reactions when stored and handled according to prescribed instructions. Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD50 (rat) approx. 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)
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

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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 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.

Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

Contaminated packaging

Dispose of empty and cleaned packaging safely.

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

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

14. TRANSPORT INFORMATION**ADR/RID/ADNR**

UN-Number	3077
Labels	9
Packaging group	III
Hazard no.	90
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE)

IMDG

UN-Number	3077
Labels	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-Number	3077
Labels	9

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Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE)

UK 'Carriage' Regulations

UN-Number	3077
Labels	9
Packaging group	III
Hazard no.	90
Emergency action code	2Z
Description of the goods	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:

Hazard warning labelling compulsory

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)

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.

Further information

WHO-classification: III (Slightly hazardous)

16. OTHER INFORMATION**Further information**

Text of R phrases mentioned in Section 3:

R20/22	Harmful by inhalation and if swallowed.
R43	May cause sensitization by skin contact.



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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.