

EVIDENCE EC7,5/100 21602 4X5L GB

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10200002694Revision Date: 30.03.2004
Print Date: 11.08.2004**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING****Product information**

Trade name	EVIDENCE EC7,5/100 21602 4X5L GB
Product code (UVP)	05940907
Product code	AE F032640 03 EC11 A4
Specification	21602
Usage	insecticide
Company	Bayer CropScience Limited Hauxton Cambridge Cambridgeshire CB2 5HU Great Britain
Telephone	+44(0)1223 870312
Telefax	+44(0)1223 872142
Emergency telephone number	0800-220876 (UK only) +44(0)1223-870312

2. COMPOSITION/INFORMATION ON INGREDIENTS**Chemical nature**Emulsifiable concentrate (EC)
Deltamethrin/Pirimicarb 7.5:100 g/l**Hazardous components**

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrases	Concentration [%]
Deltamethrin	52918-63-5 258-256-6	T, N	R50/53, R23/25	0.76
Pirimicarb	23103-98-2 245-430-1	T, N	R25, R50/53	10.10
2-Chlorotoluene	95-49-8 202-424-3	Xn, N	R20, R51/53	> 25.00 - < 50.00
Tetrapropylene benzene sulfonate-Ca-salt	11117-11-6 234-360-7	C	R21, R34, R52/53	> 1.00 - < 5.00
Iso-butanol	78-83-1 201-148-0	Xi	R10, R37/38, R41, R67	> 1.00 - < 5.00
Solvent naphtha (petroleum), light aromatic		Xn, N	R10, R37, R51/53, R65, R66, R67	> 25.00 - < 50.00

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

Flammable.
Harmful if swallowed.
Irritating to respiratory system.
Risk of serious damage to eyes.



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Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Harmful: may cause lung damage if swallowed.
Repeated exposure may cause skin dryness or cracking.
Vapours may cause drowsiness and dizziness.

4. FIRST AID MEASURES

General advice

Remove contaminated, soaked clothing immediately and dispose of safely.

Inhalation

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

Skin contact

Take off all contaminated clothing immediately. 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

Do not induce vomiting. Wash out mouth with water. Keep at rest. Obtain medical attention.

Notes to physician

Symptoms

Local:, After skin contact: paresthesia (local), May cause skin and eye irritation.

Symptoms

Systemic:, dizziness, headache, listlessness, nausea and vomiting, epigastric pain, muscular fasciculation of limbs, unconsciousness, convulsions and coma (very high doses)., symptoms of cholinesterase inhibition (gastrointestinal disturbances, dyspnoea, narrowing of the respiratory passages, bradycardia, miosis, clonic spasms).

Risks

This product/preparation contains a pyrethroid.
This product contains a cholinesterase inhibitor carbamate.
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.

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Systemic treatment:

In the event of a mouthful or more being ingested, the following measures should be considered:

Monitoring of respiratory, cardiac and central nervous system.

Constant control of blood count and cholinesterase activity.

ECG - monitoring (Electrocardiogram)

Check for pulmonary oedema in event of inhalation.

Endotracheal intubation should be done and gastric lavage performed, followed by administration of charcoal.

Artificial respiration and/or oxygen may be necessary.

Against convulsions: Give diazepam: for adults 5-10 mg intravenously as necessary until fully sedated; for children 2.5 mg i.v.

Contraindication: atropine

Contraindication: derivatives of adrenaline

Contraindications: derivatives of morphine

Contraindications: oximes (pralidoxime, oblidoxime), succinyl choline, aminophylline

Recovery: Spontaneous.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

water spray

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

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**

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).

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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, 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.
Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion

|| The product is flammable.
Keep away from sources of ignition - No smoking.
Vapours may form explosive mixture with air.

Storage

Requirements for storage areas and containers

Keep containers tightly closed in a cool, 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

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
2-Chlorotoluene	95-49-8	264 mg/m ³ (TWA)	2001	EH40 OES
Iso-butanol	78-83-1	154 mg/m ³ (TWA)	2001	EH40 OES
		231 mg/m ³ (STEL)	2001	EH40 OES

Additional advice

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Observe: Exposure Limits In Air, Gp3 200mg/m³/50ppm. (aromatic-rich hydrocarbon mixes with > 25% aromatics TRGS 901, No. 72)

Personal protective equipment

Respiratory protection	Short term: filter apparatus, Filter A
Hand protection	Chemical resistant gloves PVC or nitrile rubber gloves
Eye protection	Chemical resistant goggles must be worn.
Skin and body protection	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	Liquid
Colour	light yellow, clear
Odour	characteristic

Safety data

Flash point	40.5 °C Setaflash
Ignition temperature	> 450 °C The data refers to solvent naphtha petroleum.
Upper explosion limit	7.00 %(V) The data refers to solvent naphtha petroleum.
Lower explosion limit	0.8 %(V) The data refers to solvent naphtha petroleum.
Vapour pressure	0.3 hPa at 20 °C The data refers to solvent naphtha petroleum.
Relative vapour density	1.00 The data refers to solvent naphtha petroleum.
Density	ca. 0.99 g/cm ³ at 20 °C
Water solubility	emulsifiable

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Partition coefficient (n-octanol/water)	log Pow: 4.6 The value mentioned relates to the active ingredient deltamethrin.
Partition coefficient (n-octanol/water)	log Pow: 1.7 The value mentioned relates to the active ingredient pirimicarb.
Viscosity, kinematic	1.44 mm ² /s at 40 °C
Surface tension	13.7 mN/m at 40 °C
Other information	The product is flammable.

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 recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	LD50 (rat) 550 mg/kg
Acute inhalation toxicity	LC50 (rat) > 5.27 mg/l Exposure time: 4 h Irritating to respiratory system.
Acute dermal toxicity	LD50 (rabbit) > 4,000 mg/kg
Skin irritation	slight irritant effect - does not require labelling (rabbit)
Eye irritation	Risk of serious damage to eyes. (rabbit)
Sensitization	non-sensitizing (guinea pig) OECD Test Guideline 406, Buehler test
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	Bluegill sunfish Bioconcentration factor (BCF): 1,400 The value mentioned relates to the active ingredient deltamethrin.
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Toxicity to fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 0.13 mg/l Exposure time: 96 h
Toxicity to daphnia	EC50 (Water flea (<i>Daphnia magna</i>)) 0.00019 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient deltamethrin.
Toxicity to daphnia	EC50 (Water flea (<i>Daphnia magna</i>)) 0.005 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient pirimicarb.
Toxicity to algae	EC50 (<i>Scenedesmus subspicatus</i>) 4.9 mg/l Exposure time: 96 h
Toxicity to other organisms	LD50 (Bobwhite quail) > 2,250 mg/kg The value mentioned relates to the active ingredient deltamethrin.
Toxicity to other organisms	LD50 (Mallard duck) > 4,640 mg/kg The value mentioned relates to the active ingredient deltamethrin.
Toxicity to other organisms	LD50 (Bobwhite quail) 20.9 mg/kg The value mentioned relates to the active ingredient pirimicarb.
Toxicity to other organisms	LD50 (Mallard duck) 28.5 mg/kg The value mentioned relates to the active ingredient pirimicarb.

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
Can be landfilled or incinerated, when in compliance with local regulations.
Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as product waste.
Empty containers can be landfilled after cleaning, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

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

UN-No	1993
Labels	3
Packaging group	III
Hazard no.	30
Description of the goods	UN 1993 FLAMMABLE LIQUID, N.O.S.

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Special Provision (PIRIMICARB, SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC SOLUTION)
640E

IMDG

UN-No **1993**
Class 3
Packaging group III
Marine pollutant Marine pollutant
Description of the goods FLAMMABLE LIQUID, N.O.S.
(PIRIMICARB, SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC SOLUTION)

IATA

UN-No **1993**
Class 3
Packaging group III
Description of the goods FLAMMABLE LIQUID, N.O.S.
(PIRIMICARB, SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC SOLUTION)

CDG CPL

UN-No **1993**
Class 3
Packaging group III
Hazard identification number 30
Emergency action code 3Y
Proper shipping name FLAMMABLE LIQUID, N.O.S. (SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC)

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:

- Deltamethrin
- Pirimicarb
- Solvent naphtha (petroleum), light aromatic

Symbol(s)

Xn Harmful
N Dangerous for the environment

R-phrases)

R10 Flammable.
R22 Harmful if swallowed.
R37 Irritating to respiratory system.
R41 Risk of serious damage to eyes.
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.
R67 Vapours may cause drowsiness and dizziness.

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S-phrase(s)	
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S35	This material and its container must be disposed of in a safe way.
S39	Wear eye/face protection.
S57	Use appropriate containment to avoid environmental contamination.
S62	If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Exceptional labelling of special preparations

Restricted to professional users.

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:

R10	Flammable.
R20	Harmful by inhalation.
R21	Harmful in contact with skin.
R23/25	Toxic by inhalation and if swallowed.
R25	Toxic if swallowed.
R34	Causes burns.
R37	Irritating to respiratory system.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
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.
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.
R67	Vapours may cause drowsiness and dizziness.

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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