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CYFLUTHRIN EC 50A G

U-WW

Version 2 / EU

102000006076

Revision Date: 26.07.2010
Print Date: 07.02.2012

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

Product information

Trade name CYFLUTHRIN EC 50A G U-WW

Product code (UVP) 00298468 Usage Insecticide

Company Bayer CropScience AG

Alfred-Nobel-Straße 50 40789 Monheim am Rhein

Germany

Telefax +49(0)2173-38-7394

Responsible Department Product Safety and Specification Mgnt

+49(0)2173-38-3409/3189 (during business hours only)

Email: MSDS@bayercropscience.com

Emergency telephone number +1 (760) 476-3964 (Company 3E for Bayer CropScience)

2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

Flammable.

Harmful by inhalation and if swallowed.

Risk of serious damage to eyes.

Irritating to skin.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Emulsifiable concentrate (EC) Cyfluthrin 50 g/l

Hazardous components

Chemical Name	CAS-No. / EC-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Cyfluthrin	68359-37-5 269-855-7	T+, N	R23, R28, R50/53	5,70
Xylene	1330-20-7 215-535-7	Xn	R10, R20/21, R38	84,00
Nonylphenol ethoxylate 8 EO	37205-87-1	Xn	R22, R41, R53	< 5,00
Butan-1-ol	71-36-3 200-751-6	Xn	R10, R22, R37/38, R41, R67	< 5,00
Dodecyl benzene sulphonate, calcium salt	26264-06-2 247-557-8	Xi	R38, R41	< 5,00

For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.



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4. FIRST AID MEASURES

General advice

Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.

Inhalation

Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.

Skin contact

Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. 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. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Call a physician or poison control center immediately.

Ingestion

Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

Notes to physician

Symptoms

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

Symptoms

Systemic:, discomfort in the chest, Tachycardia, Hypotension, Nausea, Abdominal pain, Diarrhoea, Vomiting, Dizziness, Blurred vision, Headache, Anorexia, Somnolence, Coma, Convulsions, Tremors, Prostration, Airway hyperreaction, pulmonary oedema, Palpitation, Muscular fasciculation, Apathy

Risks

This product contains a pyrethroid.

Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.

Treatment

Local treatment:

Initial treatment: symptomatic.



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Treatment

Systemic treatment:

Initial treatment: symptomatic.

Monitor: respiratory and cardiac functions.

In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

Keep respiratory tract clear.

Oxygen or artificial respiration if needed.

In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens.

If not effective, phenobarbital may be used.

Contraindication: atropine.

Contraindication: derivatives of adrenaline.

There is no specific antidote.

Recovery is spontaneous and without sequelae.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray

Carbon dioxide (CO2)

Foam

Sand

Specific hazards during fire fighting

In the event of fire the following may be released:

Hydrogen chloride (HCI)

Hydrogen cyanide (hydrocyanic acid)

Hydrogen fluoride

Carbon monoxide (CO)

nitrogen oxides (NOx)

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

Contain the spread of the fire-fighting media.

Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid contact with spilled product or contaminated surfaces.

Use personal protective equipment.

Remove all sources of ignition.

Environmental precautions

Do not allow to get into surface water, drains and ground water.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.



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Additional advice

Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

7. HANDLING AND STORAGE

Handling

Advice on safe handling

Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

Take measures to prevent the build up of electrostatic charge.

Storage

Requirements for storage areas and containers

Store in original container.

Keep containers tightly closed in a dry, cool and well-ventilated place.

Store in a place accessible by authorized persons only.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Temperature tolerance min. max.

0 °C 40 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
Cyfluthrin	68359-37-5	0,01 mg/m3 (TWA)		OES BCS*
Xylene	1330-20-7	221 mg/m3 / 50 ppm (TWA)	02 2006	EU ELV
Xylene	1330-20-7	442 mg/m3 / 100 ppm (STEL)	02 2006	EU ELV
Xylene	1330-20-7	100 ppm (TWA)		OES BCS*
Xylene (Vapor.)	1330-20-7	50 mg/m3	12 2004	
Xylene (Vapor.)	1330-20-7	150 mg/m3	12 2004	
Butan-1-ol	71-36-3	100 ppm (TWA)		OES BCS*

^{*}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.



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> Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent.

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.

Skin and body protection 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.

If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully

remove and dispose of as advised by manufacturer.

Hygiene measures

Avoid contact with skin, eyes and clothing.

Keep working clothes separately.

Wash hands immediately after work, if necessary take a shower.

Remove soiled clothing immediately and clean thoroughly before using again.

Garments that cannot be cleaned must be destroyed (burnt).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form liquid, clear Colour yellow to brown Odour aromatic

Safety data

24 °C Flash point

Ignition temperature > 500 °C

Vapour pressure 15 hPa at 20 °C

69 hPa at 50 °C Vapour pressure

Vapour pressure 87 hPa at 55 °C

ca. 0,90 g/cm3 at 20 °C Density

Water solubility emulsifiable

ca. 1,3 mm2/s at 20 °C Viscosity, kinematic

Impact Sensitivity not impact-sensitive

10. STABILITY AND REACTIVITY



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Hazardous reactions No hazardous reactions when stored and handled according to

prescribed instructions.

11. TOXICOLOGICAL INFORMATION

LD50 (rat) 1.213 mg/kg Acute oral toxicity

Acute inhalation toxicity LC50 (rat) > 0.702 mg/l

Exposure time: 4 h

Determined in the form of a respirable aerosol.

Highest attainable concentration.

LD50 (rat) > 5.000 mg/kgAcute dermal toxicity

Skin irritation Irritating to skin. (rabbit)

Eye irritation Severe eye irritation. (rabbit)

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish LC50 (Rainbow trout (Oncorhynchus mykiss)) 0,00047 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient cyfluthrin.

EC50 (Water flea (Daphnia magna)) 0,00016 mg/l Toxicity to aquatic

invertebrates Exposure time: 48 h

The value mentioned relates to the active ingredient cyfluthrin.

IC50 (Desmodesmus subspicatus) > 10 mg/l Toxicity to aquatic plants

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient cyfluthrin.

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.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

14. TRANSPORT INFORMATION

ADR/RID/ADNR

UN-Number 1993 Labels 3 Packaging group Ш



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Hazard no.

Description of the goods FLAMMABLE LIQUID, N.O.S.

(XYLENE, CYFLUTHRIN SOLUTION)

Tunnel Code D/E 640E **Special Provision**

This classification is in principle not valid for carriage by tank vessel on inland waterways.

Please refer to the manufacturer for further information.

IMDG

UN-Number 1993 Labels 3 Packaging group Ш

F-E, S-E **EmS** Marine pollutant Marine Pollutant

Description of the goods FLAMMABLE LIQUID, N.O.S.

(XYLENE, CYFLUTHRIN SOLUTION)

IATA

UN-Number 1993 Labels 3 Packaging group Ш

Description of the goods FLAMMABLE LIQUID, N.O.S.

(XYLENE, CYFLUTHRIN SOLUTION)

15. REGULATORY INFORMATION

Labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.

Classification:

Classified as hazardous for supply/use.

Hazardous components which must be listed on the label:

Cyfluthrin

Xylene

Symbol(s)

Xn Harmful

Ν Dangerous for the environment

R-phrase(s)

R10 Flammable.

R20/22 Harmful by inhalation and if swallowed.

Irritating to skin. **R38**

Risk of serious damage to eyes. R41

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

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

S39 Wear eye/face protection.

Use appropriate container to avoid environmental contamination. S57



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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 3

R10 Flammable.

R20/21 Harmful by inhalation and in contact with skin.

R22 Harmful if swallowed.
R23 Toxic by inhalation.
R28 Very toxic if swallowed.

R37/38 Irritating to respiratory system and skin.

R38 Irritating to 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.

R53 May cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness.

The information given in this Data Sheet has been included in accordance with the guidelines established by Regulation (EC) 1907/2006. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

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