SAFETY DATA SHEET according to Regulation (EU) No. 1907/2006



AQUAPY EW165 12X1L BOT GB

Version 3 / GB Revision Date: 10.04.2008 102000011789 Print Date: 11.04.2008

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

Product information

Trade name AQUAPY EW165 12X1L BOT GB

Product code (UVP) 06477402 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

Responsible Department Email: ukinfo@bayercropscience.com

Emergency telephone number 0800-220876 (UK 24 hr)

+44(0)1603-242424 (Overseas 24 hr)

2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Emulsion, oil in water (EW)

Pyrethrin/Piperonyl butoxide 30:135 g/l

Hazardous components

| Chemical Name | CAS-No. / | Symbol(s) | R-phrase(s) | Concentration [%] |
|-------------------------------|------------|-----------|-------------|-------------------|
| | EINECS-No. | | | |
| Pyrethrins including cinerins | 8003-34-7 | Xn, N | R20/21/22, | 3.00 |
| | 232-319-8 | | R50/53 | |
| Piperonyl butoxide | 51-03-6 | N | R50/53 | 13.50 |
| | 200-076-7 | | | |
| Polyalkyleneoxide modified | 27306-78-1 | Xn, N | R20, R36, | > 2.50 - < 25.00 |
| Heptamethyltrisiloxane | | | R48/20, | |
| <u>II</u> ' | | | R51/53 | |

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

4. FIRST AID MEASURES

General advice

Remove contaminated clothing immediately and dispose of safely.

SAFETY DATA SHEET according to Regulation (EU) No. 1907/2006



AQUAPY EW165 12X1L BOT GB

Version 3 / GB Revision Date: 10.04.2008 102000011789 Print Date: 11.04.2008

Inhalation

Move to fresh air. Keep patient warm and 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 a simple body milk. If symptoms persist, call a physician.

Eve contact

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

Ingestion

Do NOT induce vomiting. Keep at rest. Rinse mouth. Obtain medical attention. Risk of product entering the lungs on vomiting after ingestion.

Notes to Physician

Symptoms

Local:, skin and eye paraesthesia which may be severe

Symptoms

Systemic:, dizziness, headache, anorexia, Nausea, muscular fasciculation

Risks

This product contains a pyrethrin.

Must NOT be confused with organophosphorus compounds!

Treatment

Local treatment:

Initial treatment: symptomatic.

After eye contact: Instillation of local anaesthetic drops e.g. 1% Amethocaine Hydrochloride eye drops. Give Analgesics as necessary.

Treatment

Systemic treatment:

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

Endotracheal intubation and gastric lavage, followed by administration of charcoal.

Monitoring of respiratory and cardiac functions.

Check for pulmonary oedema in event of inhalation.

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.

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

High volume water jet

Specific hazards during fire fighting

Dangerous gases are evolved in the event of a fire.

Special protective equipment for fire-fighters

In the event of fire and/or explosion do not breathe fumes.

SAFETY DATA SHEET according to Regulation (EU) No. 1907/2006



AQUAPY EW165 12X1L BOT GB

 Version 3 / GB
 Revision Date: 10.04.2008

 102000011789
 Print Date: 11.04.2008

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 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

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

Keep in suitable, closed containers for disposal.

Clean floors and contaminated objects with plenty of water.

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

No special precautions required.

Storage

Requirements for storage areas and containers

Store in a place accessible by authorized persons only.

Keep away from direct sunlight.

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

Protect from freezing.

Storage stability

Other data Storage temperature should ideally lie between 0 and 40 °C,

however, storage for two weeks at 54 °C has shown no adverse

effects regarding product safety or stability.

Suitable materials

HDPE (high density polyethylene)

Bayer Environmental Science SAFETY DATA SHEET according to Regulation (EU) No. 1907/2006



AQUAPY EW165 12X1L BOT GB

 Version 3 / GB
 Revision Date: 10.04.2008

 102000011789
 Print Date: 11.04.2008

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 |
|-------------------------------|-----------|--------------------|---------|----------|
| Pyrethrins including cinerins | 8003-34-7 | 1 mg/m3 (TWA) | 2007 | EH40 WEL |
| Pyrethrins including cinerins | 8003-34-7 | 1 mg/m3 (TWA) | 02 2006 | EU ELV |
| Piperonyl butoxide | 51-03-6 | 500 ppm | | 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.

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 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.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form emulsion

Colour white to light yellow

SAFETY DATA SHEET according to Regulation (EU) No. 1907/2006



AQUAPY EW165 12X1L BOT GB

Version 3 / GB Revision Date: 10.04.2008 102000011789 Print Date: 11.04.2008

Odour weak, characteristic

Safety data

pH <= 6 at 100 % (20 °C)

Flash point > 79 °C

Density approx. 1.00 g/cm³ at 20 °C

Water solubility emulsifiable

Viscosity, dynamic at 20 °C

Velocity gradient 7.5 /s

Surface tension 25.8 mN/m

Oxidizing properties No oxidizing properties

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 recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity LD50 (rat) > 5,000 mg/kg

Acute Inhalation Toxicity LC50 (rat) > 1.64 mg/l

Exposure time: 4 h

Acute Dermal Toxicity LD50 (rat) > 5,000 mg/kg

Skin Irritation No skin irritation. (rabbit)

Eye Irritation No eye irritation. (rabbit)

Sensitization Non-sensitizing. (mouse)

OECD Test Guideline 429, local lymph node assay (LLNA)

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).

The toxicological data refer to a similar formulation.

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

SAFETY DATA SHEET according to Regulation (EU) No. 1907/2006



AQUAPY EW165 12X1L BOT GB

Version 3 / GB
102000011789

Revision Date: 10.04.2008
Print Date: 11.04.2008

Bioaccumulation Bluegill sunfish

Bioconcentration factor (BCF): 471

The value mentioned relates to the active ingredient pyrethrin.

Bioaccumulation Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): 260

The value mentioned relates to the active ingredient piperonyl

butoxide.

Ecotoxicity effects

Toxicity to Fish LC50 (Rainbow trout (Oncorhynchus mykiss)) 0.244 mg/l

Exposure time: 96 h

Toxicity to daphnia EC50 (Daphnia) 0.216 mg/l

Exposure time: 48 h

Toxicity to algae EC50 (Algae) 4.9 mg/l

Exposure time: 72 h

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

Small containers (< 10 I or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times.

Add washings to sprayer at time of filling.

Dispose of empty and cleaned packaging safely.

Large containers (> 25 l or > 25 kg) should not be rinsed or re-used for any other purpose.

Return large containers to supplier.

Follow advice on product label and/or leaflet.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

14. TRANSPORT INFORMATION

ADR/RID/ADNR

UN-Number 3082
Labels 9
Packaging group III
Hazard no. 90

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(PYRETHRINS SOLUTION)

IMDG

SAFETY DATA SHEET according to Regulation (EU) No. 1907/2006



7/8

AQUAPY EW165 12X1L BOT GB

Version 3 / GB Revision Date: 10.04.2008 Print Date: 11.04.2008

UN-Number 3082
Labels 9
Packaging group III

EmS F-A , S-F Marine pollutant Marine pollutant

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(PYRETHRINS SOLUTION)

IATA

UN-Number 3082
Labels 9
Packaging group III

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(PYRETHRINS SOLUTION)

UK 'Carriage' Regulations

UN-Number 3082
Labels 9
Packaging group III
Hazard no. 90
Emergency action code 3Z

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(PYRETHRINS SOLUTION)

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:

· Pyrethrins including cinerins

· Piperonyl butoxide

Symbol(s)

N Dangerous for the environment

R-phrase(s)

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

aquatic environment.

S-phrase(s)

This material and its container must be disposed of in a safe way.
Use appropriate container to avoid environmental contamination.

CLASSIFICATION ACCORDING TO SPECIFIC UK REGULATIONS:

The labelling information below is that which has been approved under 'The Control of Pesticides Regulations 1986' and/or 'Part III of the Food and Environment Protection Act 1985' and/or 'Plant Protection Product Regulations 1999' and any subsequent amendments and may differ from that indicated by any toxicological and/or other testing otherwise indicated in this 'Safety Data Sheet'.

SAFETY DATA SHEET according to Regulation (EU) No. 1907/2006



8/8

AQUAPY EW165 12X1L BOT GB

Version 3 / GB Revision Date: 10.04.2008 Print Date: 11.04.2008

Symbol(s)

N Dangerous for the environment

R-phrase(s)

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

S-phrase(s)

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

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 Harmful by inhalation.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36 Irritating to eyes.

R48/20 Harmful: danger of serious damage to health by prolonged exposure

through inhalation.

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.

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.