

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 of 18 December 2006 (REACH)

BORNEO

Ref. S128311SC/bF/200gb

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

Product label name BORNEO containing etoxazole, 11% suspension concentrate. MAPP 13919
 GIFAP Code : SC
Use Acaricide (agricultural use)
Supplier Interfarm UK Ltd, 36, Newgate Street, Doddington, Cambs. PE15 0SR. UK
 Tel +44(0)1354 741414

2. HAZARD IDENTIFICATION

Chemical description *Etoxazole, 11% suspension concentrate*
 GIFAP Code : SC

Classified as hazardous according to EU directives 1999/45/EC, 2001/60/EC and 2006/8/EC:
 Classification based on Tests



Symbol(s) DANGEROUS FOR THE ENVIRONMENT (N)
R(isk) phrase(s) R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
S(afety) phrase(s) S23: Do not breathe spray
 S35: This material and its container must be disposed of in a safe way
 S57: Use appropriate container to avoid environmental contamination.

Special risks and safety precautions (directive 91/414/EEC):

General provisions SP 1: Do not contaminate water with the product or its container (Do not clean application equipment near surface water).
Specific safety precautions SPe 3: To protect aquatic organisms respect an unsprayed buffer zone of (as indicated on the label) to surface water bodies.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is to be considered as a preparation in conformance to EC directives.
 Information on hazardous ingredients :

Chemical description		Etoxazole, 11% suspension concentrate		
Composition/Information on ingredients				
Number	% w/v	CAS number	Chemical name	
1	11	153233-91-1	(RS)-5-tert-butyl-2-[2-(2,6-difluorophenyl)-4,5-dihydro-1,3-oxazol-4-yl] phenetole	
Number	EC number	Annex-1 number	Symbol(s)	Risk phrase(s)
1			N	R50/53

Other information SCAE code : PHIL 98/03

4. FIRST AID MEASURES

Symptoms and effects Mildly irritating to eyes.
First aid
General In all cases of doubt, seek medical attention.
Inhalation Move to fresh air. If symptoms persist, seek medical advice.
Skin Remove contaminated clothing. Wash immediately with soap and water.
Eye Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.
Ingestion Rinse mouth. Never induce vomiting in unconscious or confused persons. Seek medical advice.
Advice to physician No specific recommendations.

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5. FIRE-FIGHTING MEASURES

Extinguishing media	Dry chemical powder, carbon dioxide, sand, water.
Unsuitable extinguishing media	none known
Special exposure hazards	none known
Hazardous decomposition/combustion products	No hazardous decomposition products known.
Protective equipment	Wear self contained breathing apparatus. Wear suitable protective clothing and eye/face protection.
Other information	Water used to extinguish a fire should not be allowed to enter the drainage system or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with eyes. For personal protection see section 8.
Environmental precautions	Do not allow to escape into sewage system or water courses.
Methods for cleaning up	In case of spills (liquid), soak it up immediately with suitable absorbent, such as sawdust or granular absorbent clay. Sweep up and dispose as waste following local regulations. Do not wash residues into drains or other waterways.

7. HANDLING AND STORAGE

Handling	The usual precautions for handling chemicals should be observed. For personal protection see section 8.
Fire and explosion prevention	No specific recommendations.
Storage requirements	Store in a dry and cool place. Keep container in a well-ventilated place. Keep away from food, drink and animal feedingstuffs.
Other information	Do not mix with water (except for the normal preparation).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	Provide adequate ventilation.
Exposure limits	No exposure limits have been established for this material.
Personal protection	
Respiratory	The usual precautions for handling chemicals should be observed.
Hand	Wear protective gloves.
Eye	Wear safety goggles or face shield.
Skin and body	Wear suitable protective clothing.
Other information	Launder clothes before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	opaque liquid
Colour	white
Odour	faint chemical
Boiling point/range	not determined
Melting point/range	-4.3°C (freezing point)
Flash point	>70°C (Abel-Pensky)
Flammability	not flammable
Autoignition temperature	no self ignition up to 600°C
Explosive properties	not explosive
Explosion limits	not determined
Oxidising properties	not oxidising
Vapour pressure	not determined
Density	1.03 g/ml (20°C)
Bulk density	not applicable

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Solubility in water	dispersible in water (solubility of etoxazole = 0.0704 mg/l, 20°C)
Solubility in other solvents	not applicable
pH value	7.7 (1% in water, 24°C)
Partition coefficient n-octanol/water	not applicable (etoxazole: log Pow = 5.5, 20°C)
Relative vapour density (air = 1)	not determined
Viscosity	31-452 mPa.s (depends on shear rate ; 20°C)
Surface tension	42 mN/m (0.166 ml/l ; 20°C)

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions (see section 7).
Conditions to avoid	none known.
Materials to avoid	none known.
Hazardous decomposition products	No hazardous decomposition products known (see also section 5).

11. TOXICOLOGICAL INFORMATION

Name	<i>Etoxazole, 11% suspension concentrate</i>
Acute toxicity	
Oral LD50	rat: >5000 mg/kg
Dermal LD50	rat: >2000 mg/kg
Inhalation	rat (4 hours): >1.09 mg/l (maximum feasible concentration ; whole body)
Irritation	
Skin	not irritant
Eye	mild irritant
Sensitization	not sensitizing (Maximisation test)
Other toxicological information	<i>Active substance (etoxazole technical grade):</i> not mutagenic, not teratogenic, not carcinogenic, not toxic to reproduction.

12. ECOLOGICAL INFORMATION

Name	<i>Etoxazole, 11% suspension concentrate</i>
Ecotoxicity	
Daphnia	Acute toxicity, 48h-EC50 (<i>Daphnia magna</i>) : 19 µg/l (equiv. 2 µg a.s./l)
Bees	Acute contact toxicity, LD50 (<i>Apis mellifera</i>) : >100 µg a.s./bee Acute oral toxicity, LD50 (<i>Apis mellifera</i>) : >100 µg a.s./bee

The following data are applicable to the ingredient(s) listed below:

Name	<i>Etoxazole, technical grade</i>
Ecotoxicity	
Fish	Acute toxicity, 96h-LC50 (<i>Oncorhynchus mykiss</i>) : 2.8 mg/l (semi-static test) Acute toxicity, 96h-LC50 (<i>Lepomis macrochirus</i>) : 1.4 mg/l (semi-static test)
Daphnia	Acute toxicity, 48h-EC50 (<i>Daphnia magna</i>) : 7.1 µg/l
Algae	Acute toxicity, 72h-EC ₅₀ & EC _{r50} (<i>Selenastrum capricornutum</i>) : >10 mg/l
Birds	Acute toxicity, LD50 (Mallard duck) : >2000 mg/kg
Bees	Acute contact toxicity, 48h-LD50 (<i>Apis mellifera</i>) : >200 µg/bee Acute oral toxicity, 48h-LD50 (<i>Apis mellifera</i>) : >200 µg/bee
Earthworms	Acute oral toxicity, 14d-LC50 (<i>Eisenia foetida</i>) : >1000 mg/kg soil
Fate	
Degradation Biotic	Not readily biodegradable
Degradation Abiotic	pH5: DT50 = 9.6 days at 20°C pH7: DT50 = 147 - 161 days at 20°C pH9: DT50 = 165 - 217 days at 20°C
Bioaccumulation	Partition coefficient n-octanol/water log Pow : 5.5 (20°C) Bio Concentration Factor (BCF), exposure 30 days (<i>Oncorhynchus mykiss</i>): 2500 – 3300 (depuration time: CT50 = 3-6 days - whole fish)

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13. DISPOSAL CONSIDERATIONS

Product According to local regulations. For further advice contact manufacturer.
Contaminated packaging According to local regulations.

14. TRANSPORT INFORMATION

Land transport ADR/RID

ADR/RID class	9	Packing group	III
Label(s)	9	Substance Identification no.	3082
Hazard Identification no.	90	UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 11% etoxazole)		

Sea transport IMO/IMDG code

Class	9	UN number	3082
Marine pollutant	no	Packing group	III
EMS	F-A, S-F		
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 11% etoxazole)		

Air transport ICAO-TI/IATA-DGR

Class	9	UN number	3082
		Packing group	III
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 11% etoxazole)		

15. REGULATORY INFORMATION

See hazard identification in section 2.

As appropriate, the classification is based on:

- directive 2001/59/EC (results of the experimental studies),
- directives 1999/45/EC, 2001/60/EC, 2006/8/EC (classification based on the concentration of active substance and ingredients),
- directive 2003/82/EC for pesticides (special risks and safety precautions).

The safety data sheet is written according to Regulation (EC) No 1907/2006 of 18 December 2006 (REACH).

16. OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

Full text of risk phrase(s) used in this document:

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

History

Date of previous version	29 April 2005 (revision 1.10)
Date of revision	20 June 2007
Revision	2.00

Changes were made in sections nos 2, 3, 14, 15, 16, according to changes in the regulations.