

**GALMANO**

Version 1  
Revision Date 26.08.2003

GB  
102000000744

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING****Product information**

Trade name : GALMANO  
 Product code : AE C597265 00 FS15 A7  
 Specification : 21594  
 Usage : fungicide  
 Company : Bayer CropScience Limited  
 Hauxton  
 Cambridge  
 Cambridgeshire CB2 5HU  
 United Kingdom  
 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**

Flowable concentrate for seed treatment (FS), contains:  
Fluquinconazole 167 g/l

**Hazardous components**

Chemical Name	CAS-No.	Symbol(s):	R-phrases(s)	Concentration [%]
Fluquinconazole	136426-54-5	T, N	R21 R23/25 R38 R48/25 R50/53	15.20
1,2 Propanediol	57-55-6			> 5.00 - < 25.00

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

Harmful if swallowed.  
 Toxic: danger of serious damage to health by prolonged exposure if swallowed.  
 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**4. FIRST AID MEASURES**

General advice : Remove contaminated, soaked clothing immediately and dispose of safely.

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- Inhalation : Move the patient to fresh air and keep at rest. If symptoms persist, call a physician.
- Skin contact : Wash off immediately with soap and plenty of water. Seek medical aid if at all worried.
- Eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion : Wash out mouth with water. Do not induce vomiting. Keep at rest. Seek URGENT medical advice.

**Notes to physician**

- Symptoms : Local:, To date no symptoms are known.
- Symptoms : Systemic:, lethargy, weakness, ataxia, muscle twitching, incontinence
- Treatment : Local treatment:  
Initial treatment should be symptomatic and supportive.
- Treatment : Systemic treatment:  
Monitoring of: respiratory, cardiac and central nervous system.  
Carefully monitor the liver functions.  
Gastric lavage with charcoal, if necessary further treatment.  
There is no antidote.

**5. FIRE-FIGHTING MEASURES**

- Suitable extinguishing media : water spray  
alcohol-resistant foam  
dry chemical  
carbon dioxide (CO<sub>2</sub>)
- Extinguishing media which must not be used for safety reasons : Product itself is non-combustible; fire extinguishing measures to suit surroundings.
- 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.



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**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).
- Methods for cleaning up : 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 with water and detergents, 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. Provide good ventilation of working area (local exhaust ventilation if necessary).
- Advice on protection against fire and explosion : No special precautions required.

**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.
- Further information on storage conditions : Keep away from direct sunlight. Protect against frost.
- Storage temperature : 0 - 30 °C
- Suitable materials : Keep in original packaging, tightly closed.

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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
1,2 Propanediol	57-55-6	10 mg/m <sup>3</sup> (TWA)	2001	EH40 OES
		474 mg/m <sup>3</sup> (TWA)	2001	EH40 OES

**Personal protective equipment**

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection : Chemical resistant gloves  
PVC gloves  
nitrile 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 soaked clothing immediately.  
Remove soiled 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 : red

**Safety data**

- pH : 6.5 - 8.5  
Note: Determined in the undiluted form
- Density : ca. 1.10 g/cm<sup>3</sup> at 20 °C
- Water solubility : Note: Miscible
- Partition coefficient (n-octanol/water) : log Pow: 3.24  
at: 20 °C Note: The value mentioned relates to the active ingredient fluquinconazole.
- Viscosity, dynamic : 7,000 - 10,000 mPa.s at 20 °C



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Method: Brookfield

Other information : The product is not combustible.

**10. STABILITY AND REACTIVITY**

Conditions to avoid : Note: Extremes of temperature and direct sunlight.  
Materials to avoid : None  
Hazardous reactions : No hazardous reactions when stored and handled according to prescribed instructions.  
Note: Stable under recommended storage conditions.

**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity : LD50 (rat) 429 mg/kg  
Acute dermal toxicity : LD50 (rat) > 4,000 mg/kg  
Skin irritation : rabbit  
Result: No skin irritation  
Eye irritation : rabbit  
Result: No eye irritation  
Sensitization : guinea pig  
Result: non-sensitizing  
Method: OECD Test Guideline 406, Buehler test  
Further information : The toxicological data refer to a similar formulation.

**12. ECOLOGICAL INFORMATION**

**Elimination information (persistence and degradability)**

Bioaccumulation : Bluegill sunfish  
Bioconcentration factor (BCF): 87  
Test substance: The value mentioned relates to the active ingredient fluquinconazole.

**Ecotoxicity effects**

Toxicity to fish : LC50: 1.9 mg/l  
Rainbow trout (*Oncorhynchus mykiss*)  
Exposure time: 96 h  
Test substance: The value mentioned relates to the active ingredient fluquinconazole.  
Toxicity to fish : LC50: 1.9 mg/l

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		Carp Exposure time: 96 h Test substance: The value mentioned relates to the active ingredient fluquinconazole.
Toxicity to fish	:	LC50: 1.34 mg/l Bluegill sunfish Exposure time: 96 h Test substance: The value mentioned relates to the active ingredient fluquinconazole.
Toxicity to daphnia	:	EC50: > 5 mg/l Water flea (Daphnia magna) Exposure time: 48 h Test substance: The value mentioned relates to the active ingredient fluquinconazole.
Toxicity to algae	:	EC50: 0.014 mg/l Algae Exposure time: 96 h Test substance: The value mentioned relates to the active ingredient fluquinconazole.
Toxicity to other organisms	:	LD50: > 2,000 mg/kg Mallard duck Test substance: The value mentioned relates to the active ingredient fluquinconazole.
Toxicity to other organisms	:	LD50: 4,392 mg/kg Bobwhite quail Test substance: The value mentioned relates to the active ingredient fluquinconazole.

**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

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<b>ADR/RID/</b>	: UN-No	<b>2902</b>
<b>ADNR</b>	Labels	6.1
	Packaging group	III
	Hazard no.	60
	Description of the goods	UN 2902 PESTICIDE, LIQUID, TOXIC, N.O.S. ( FLUQUINCONAZOLE SOLUTION )
<b>IMDG</b>	: UN-No	<b>2902</b>
	Class	6.1
	Packaging group	III
	EmS	6.1-02
	Marine pollutant	P
	Description of the goods	PESTICIDE, LIQUID, TOXIC, N.O.S. ( FLUQUINCONAZOLE SOLUTION )
<b>IATA</b>	: UN-No	<b>2902</b>
	Class	6.1
	Packaging group	III
	Description of the goods	Pesticide, liquid, toxic, n.o.s. ( FLUQUINCONAZOLE SOLUTION )
<b>CDG CPL</b>	: UN-No	<b>2902</b>
	Class	6.1
	Packaging group	III
	Hazard identification number	60
	Emergency action code	2X
	Proper shipping name	PESTICIDE LIQUID, TOXIC, N.O.S. (FLUQUINCONAZOLE)

**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:

- Fluquinconazole

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)

Symbol(s): : T Toxic  
N Dangerous for the environment



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R-phrase(s)	: R22 R48/25  R51/53	Harmful if swallowed. Toxic: danger of serious damage to health by prolonged exposure if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S35  S57	This material and its container must be disposed of in a safe way. Use appropriate containment to avoid environmental contamination.

**16. OTHER INFORMATION**

**Further information**

Text of R phrases mentioned in Section 2:

- R21 Harmful in contact with skin.
- R23/25 Toxic by inhalation and if swallowed.
- R38 Irritating to skin.
- R48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.
- R50/53 Very 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 will be highlighted in the margin. This version replaces all previous versions.