

**TWIST EC 125****PH**

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102000007802Revision Date: 23.04.2004
Print Date: 23.04.2004**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING****Product information**

Trade name	TWIST EC 125	PH
Product code (UVP)	05584566, 05600499, 05791006, 06190030	
Usage	fungicide	
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)
Trifloxystrobin 125 g/l**Hazardous components**

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-pharse(s)	Concentration [%]
Trifloxystrobin	141517-21-7	Xi, N	R43, R50/53	11.70
2,4,6-tris(1-phenylethyl)polyoxyethylenate d phosphates	90093-37-1	Xi	R36	2.50
N-Methyl-2-pyrrolidone	872-50-4 212-828-1	Xi	R36/38	63.30
Ethoxylated polyarylphenol	99734-09-5		R52/53	10.00

3. HAZARDS IDENTIFICATION**Risk advice to man and the environment**Irritating to eyes.
May cause sensitization by skin contact.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**4. FIRST AID MEASURES****General advice**

Move out of dangerous area. If the patient is likely to become unconscious, place and transport in stable sideways position Remove soiled or soaked clothing immediately. Also heed the risks to your own person.



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Inhalation

Move the patient to fresh air and keep at rest. Call a physician immediately.

Skin contact

Wash off immediately with soap and plenty of water. Call a physician immediately.

Eye contact

In case of contact with eyes rinse thoroughly with water Call a physician immediately.

Ingestion

Do not induce vomiting. Wash out mouth with water. Call a physician immediately.

Notes to physician

Treatment

Treat symptomatically.

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 can be released:
hydrogen cyanide (hydrocyanic acid)
hydrogen fluoride
carbon monoxide (CO)
nitrogen oxides (NO_x)

Special protective equipment for fire-fighters

In the event of fire and/or explosion do not breathe fumes.
Use 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.
Wear personal protective equipment. Unprotected persons must be kept away.

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).
Clean contaminated floors and objects thoroughly, observing environmental regulations
Pack spilled material in suitable containers for recovery or disposal.

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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.

Storage

Requirements for storage areas and containers

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

Store in original container.

Store in a place accessible by authorized persons only.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Storage stability

Storage temperature > -10 - < 40 °C

Suitable materials

HDPE (high density polyethylene)

coextruded polymer barrier

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
N-Methyl-2-pyrrolidone	872-50-4	103 mg/m ³ (TWA)	2001	EH40 OES
		309 mg/m ³ (STEL)	2001	EH40 OES

Personal protective equipment

Respiratory protection

If product is handled while not enclosed, and if skin contact may occur:

Full mask

Multi-range filter ABEK/P2

Hand protection

solvent-resistant gloves

Eye protection

Chemical resistant goggles must be worn.

Skin and body protection

Light protective clothing, PVC

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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 or soaked clothing immediately and clean thoroughly before using again.
- Garments that cannot be cleaned must be destroyed (burnt).

Protective measures

- If product is handled while not enclosed, and if skin contact may occur:
complete suit protecting against chemicals

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	liquid, clear
Colour	yellow to brownish
Odour	aromatic

Safety data

Flash point	86 °C
Density	ca. 1.07 g/ml at 20 °C
Water solubility	emulsifiable
Viscosity, dynamic	11.3 mPa.s at 20 °C

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) > 3,000 mg/kg Test conducted with a similar formulation.
Acute dermal toxicity	LD50 (rat) > 4,000 mg/kg Test conducted with a similar formulation.
Skin irritation	non-irritant (rabbit) Test conducted with a similar formulation.
Eye irritation	Irritating to eyes. (rabbit) Test conducted with a similar formulation.

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Sensitization	sensitizing (guinea pig) OECD 406, Buehler test Test conducted with a similar formulation.
Sensitization	sensitizing (guinea pig) OECD Test Guideline 406, Magnusson & Kligman test Test conducted with a similar formulation.

12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish	LC50 (Brook trout (<i>Salmo trutta</i>)) 0.14 mg/l Exposure time: 96 h
Toxicity to daphnia	EC50 (Water flea (<i>Daphnia magna</i>)) 0.16 mg/l Exposure time: 48 h
Toxicity to algae	EC50 (<i>Pseudokirchneriella subcapitata</i>) 0.51 mg/l Growth rate Exposure time: 72 h

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	3082
Labels	9
Packaging group	III
Hazard no.	90
Description of the goods	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION)

IMDG

UN-No	3082
Class	9

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Packaging group	III
Marine pollutant	Marine pollutant
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION)

IATA

UN-No	3082
Class	9
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION)

CDG CPL

UN-No	3082
Class	9
Packaging group	III
Hazard identification number	90
Emergency action code	3Z
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN)

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:

- Trifloxystrobin
- 1-Methylpyrrolidine

Symbol(s)

Xi	Irritant
N	Dangerous for the environment

R-phrase(s)

R36	Irritating to eyes.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S24	Avoid contact with the skin.
S35	This material and its container must be disposed of in a safe way.
S37	Wear suitable gloves.
S57	Use appropriate containment to avoid environmental contamination.

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: III (Slightly hazardous)

16. OTHER INFORMATION



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Further information

Text of R phrases mentioned in Section 2:

R36	Irritating to eyes.
R36/38	Irritating to eyes and skin.
R43	May cause sensitization by skin contact.
R50/53	Very 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.

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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