

**TIGRESS ULTRA**Version 2
Revision Date 20.03.2003GB
102000000821**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING****Product information**

Trade name : TIGRESS ULTRA

Product code : AE F023408 34 EW28 A3

Specification : 21400

Usage : herbicide

Company : Bayer CropScience Limited
Hauxton
Cambridge
Cambridgeshire CB2 5HU
United Kingdom

Telephone : +44(0)1223 870312

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+44(0)1223-870312

2. COMPOSITION/INFORMATION ON INGREDIENTS**Chemical nature**

Emulsion, oil in water (EW), contains:
Diclofop-methyl/Fenoxaprop-p-ethyl/Mefenpyr-diethyl 250:20:40 g/l

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrase(s)	Concentration [%]
Diclofop-methyl (ISO)	51338-27-3	Xn, N	R22 R43 R50/53	22.70
Fenoxaprop-P-ethyl	71283-80-2	Xi, N	R43 R50	1.80
Mefenpyr-diethyl	135590-91-9	N	R51/53	3.60
Fatty alcohol polyglycol ether	9043-30-5	Xn, N	R41 R51/53 R22	> 5.00 - < 25.00
Glycerol	56-81-5			> 5.00 - < 25.00
Solvent naphtha (petroleum), heavy arom.		Xn, N	R65 R66 R51/53	> 5.00 - < 25.00



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3. HAZARDS IDENTIFICATION

Risk advice to man and the environment

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

4. FIRST AID MEASURES

- Inhalation : Move the patient to fresh air and keep at rest. If symptoms persist, call a physician.
- Skin contact : Take off all contaminated clothing immediately. When in contact with the skin, clean with soap and water. If symptoms persist, call a physician.
- Eye contact : In case of contact with eyes rinse thoroughly with plenty of water. If symptoms persist, seek medical advice
- Ingestion : Do not induce vomiting. Rinse mouth thoroughly with water. Drink water in small gulps. If symptoms persist, call a physician.

Notes to physician

- Symptoms : To date no symptoms are known.,
- Treatment : Local treatment:
Treat symptomatically.
Systemic treatment:
Initial treatment should be symptomatic and supportive.
Monitoring of: kidney, liver and red blood cell count.
Observe specific parameters: blood lipids and cholesterol for hypolipidaemia and lowered cholesterol.
Gastric lavage, then charcoal (carbo medicalis) and sodium sulfate.
Elimination by dialysis (forced alkaline diuresis).

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : water spray jet
foam
carbon dioxide (CO₂)
dry powder
- Specific hazards during fire fighting : In the event of fire the following can be released:
carbon dioxide (CO₂)
carbon monoxide (CO)
nitrogen oxides (NO_x)
hydrogen chloride (HCl)
- Special protective equipment for fire-fighters : Use self-contained breathing apparatus.
Wear full protective suit.



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Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Use personal protective equipment.
Evacuate personnel to safe areas.

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).
Pack spilled material in suitable containers for recovery or disposal.

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 : Local exhaust ventilation.

Advice on protection against fire and explosion : The product is combustible.

Advice on protection against fire and explosion : **The product neither sensitive to impacts nor to rub effects and therefore not explosive.**

Storage

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place.

Further information on storage conditions : The storage temperature should lie between 0 °C and 30 °C, maximum up to 50 °C.
Keep away from direct sunlight.
Protect against frost.

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Advice on common storage : Keep away from food, drink and animal feeding stuffs.

Storage period : > 24 Months

Storage temperature : 20 - 30 °C

Suitable materials : Polyamid innerlined polyethylene (coex) bottles

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
Glycerol	56-81-5	10 mg/m ³ (TWA)	2002	EH40 OES

Additional advice : Observe: Exposure Limits In Air, Gp3 200mg/m³/50ppm.
(aromatic-rich hydrocarbon mixes with > 25% aromatics TRGS 901, No. 72)

Engineering measures

See chapter 7; no measures exceeding those mentioned are necessary.

Personal protective equipment

Hand protection : PVC disposable gloves
solvent-resistant gloves

Eye protection : safety glasses / face shield

Skin and body protection : Light protective clothing, PVC

Hygiene measures : Do not eat, drink or smoke during work time.
Clean hands and face at work intervals and after work.

Protective measures : Avoid contact with eyes.
Avoid contact with skin.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form : liquid
Colour : grey white
Odour : aromatic

Safety data

pH : 6.9

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	Note: Determined as a 5% emulsion in distilled water.
Flash point	: > 100.00 °C
Autoignition temperature	: 435 °C
Density	: 1.111 g/cm ³ at 20 °C
Water solubility	: at 20 °C Note: emulsifiable
Viscosity, kinematic	: 265 mm²/s at 40 °C
Impact Sensitivity	: Not impact-sensitive 10 kg at 0.4 m

10. STABILITY AND REACTIVITY

Thermal decomposition	: > 200 °C
Hazardous reactions	: Note: Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50 (rat) > 2,000 mg/kg
Acute inhalation toxicity	: LC50 (rat) > 4.06 mg/l Exposure time: 4 h Remarks: Highest attainable concentration.
Acute dermal toxicity	: LD50 (rat) > 5,000 mg/kg
Skin irritation	: rabbit Result: No skin irritation
Eye irritation	: rabbit Result: No eye irritation
Sensitization	: guinea pig Result: non-sensitizing Method: OECD 406, Buehler test

12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish	: LC50: 0.88 mg/l Oncorhynchus mykiss (Rainbow trout) Exposure time: 96 h
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Toxicity to fish	:	LC50: 1.26 mg/l Lepomis macrochirus (Bluegill sunfish) Exposure time: 96 h
Toxicity to daphnia	:	EC50: 1.8 mg/l Water flea (Daphnia magna) Exposure time: 48 h
Toxicity to algae	:	EC50: 3.5 mg/l Selenastrum capricornutum Exposure time: 96 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, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

14. TRANSPORT INFORMATION

ADR/RID	:	UN-No	3082
		Class	9
		Packaging group	III
		Hazard no.	90
		Description of the goods	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DICLOFOP-METHYL/FENOXAPROP-P- ETHYL/SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC)
ADNR	:	UN-No	3082
		Class	9
		Item	11
		Letter	c
		Description of the goods	3082 Environmentally hazardous substance, liquid, n.o.s. (DICLOFOP-METHYL/FENOXAPROP-P- ETHYL/SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC)

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IMDG	: UN-No	3082
	Class	9
	Packaging group	III
	EmS	NONE
	Marine pollutant	P
	Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DICLOFOP-METHYL 22.7%/FENOXAPROP-P- ETHYL 1.8%/SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC)
IATA	: UN-No	3082
	Class	9
	Packaging group	III
	Description of the goods	Environmentally hazardous substance, liquid, n.o.s. (DICLOFOP-METHYL 22.7%/FENOXAPROP-P- ETHYL 1.8%/SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC)
CDG CPL	: UN-No	3082
	Class	9
	Packaging group	III
	Hazard identification number	90
	Emergency action code	2X
	Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DICLOFOP- METHYL/FENOXAPROP-P-ETHYL/SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC)

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:

- Diclofop-methyl (ISO)
- Fenoxaprop-P-ethyl
- Mefenpyr-diethyl

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)	: S35	This material and its container must be disposed of in a safe way.
	S57	Use appropriate containment to avoid environmental contamination.
Exceptional labelling of special preparations	: Contains diclofop-methyl. May produce an allergic reaction. Contains Fenoxaprop-P-ethyl. May produce an allergic	



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reaction.
Contains 5-chloro-2-methyl-isothiazol-3-one/2-methyl-isothiazol-3-one. May produce an allergic reaction.
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

Further information

Text of R phrases mentioned in Section 2:

- R22 Harmful if swallowed.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitization by skin contact.
- R50 Very toxic to aquatic organisms.
- 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.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.

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.