



DICOTOX EXTRA (AFPN) 0000 1X25L GB

Version 1 / GB
10200001686

1/8
Revision Date: 20.11.2003
Print Date: 20.11.2003

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

Product information

Trade name	DICOTOX EXTRA (AFPN) 0000 1X25L GB
Product code (UVP)	05923115
Product code	TADS6873
Product code (EXP)	30472A
Specification	12567
Usage	herbicide
Company	Bayer Environmental Science Durkan House 214-224 High Street Waltham Cross Hertfordshire EN8 7DP Great Britain
Telephone	+44(0)1992 784270
Telefax	+44(0)1992 784276
Emergency telephone number	0800-220876 (UK only) +44(0)1223-870312

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Emulsifiable concentrate (EC)
2,4-D 400 g/l

Hazardous components

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-pharse(s)	Concentration [%]
2,4-D Ethylhexyl ester	1928-43-4	Xn, N	R22, R43, R50/53	60.40
Ethoxylated polyarylphenol	99734-09-5		R52/53	> 1.00 - < 5.00
Calcium alkylarylsulfonate		Xi	R36/38	> 1.00 - < 5.00
Iso-butanol	78-83-1 201-148-0	Xi	R10, R37/38, R41, R67	> 1.00 - < 5.00
Solvent naphtha (petroleum), heavy arom.		Xn, N	R65, R66, R67, R51/53	> 25.00 - < 50.00

3. HAZARDS IDENTIFICATION

Risk advice to man and the environment

Harmful if swallowed.
May cause sensitization by skin contact.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Harmful: may cause lung damage if swallowed.
Repeated exposure may cause skin dryness or cracking.
Vapours may cause drowsiness and dizziness.



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4. FIRST AID MEASURES

General advice

Remove contaminated, soaked clothing immediately and dispose of safely.

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. If symptoms persist, call a physician.

Eye contact

In case of contact with eyes rinse thoroughly with water. Seek medical advice immediately.

Ingestion

Do not induce vomiting. Wash out mouth with water. Keep at rest. Obtain medical attention.

Notes to physician

Symptoms

Local: May cause skin and eye irritation.

Symptoms

Systemic: To date no symptoms are known.

Treatment

Local treatment:

Initial treatment should be symptomatic and supportive.

Treatment

Systemic treatment:

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

Gastric lavage with charcoal, if necessary further treatment.

Observe specific parameters: blood pressure, levels of 2,4-D in plasma and urine, pH in urine.

Elimination by dialysis (forced alkaline diuresis).

There is no antidote.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

water spray

alcohol-resistant foam

dry powder

carbon dioxide (CO₂)

Extinguishing media which must not be used for safety reasons

high volume water jet

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, 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

The product is combustible.
Keep away from sources of ignition - No smoking.
Vapours may form explosive mixture with air.

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.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Storage stability

Storage temperature 0 - 30 °C

Suitable materials

Keep in original packaging, tightly closed.



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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
Iso-butanol	78-83-1	154 mg/m3 (TWA) 231 mg/m3 (STEL)	2001 2001	EH40 OES EH40 OES

Additional advice

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

Personal protective equipment

- Respiratory protection Short term: filter apparatus, Filter A
- Hand protection Chemical resistant gloves
PVC or nitrile rubber 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 soiled clothing immediately.
- Remove soaked 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 amber
- Odour characteristic

Safety data

- Flash point 62 °C
The data refers to naphtha solvent (petroleum).
- Ignition temperature > 450 °C
The data refers to naphtha solvent (petroleum).
- Upper explosion limit 7.00 %(V)
The data refers to naphtha solvent (petroleum).



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Lower explosion limit	0.8 %(V) The data refers to naphtha solvent (petroleum).
Vapour pressure	0.3 hPa at 20 °C The data refers to naphtha solvent (petroleum).
Relative vapour density	1.00 The data refers to naphtha solvent (petroleum).
Density	ca. 1.08 g/cm ³ at 20 °C
Water solubility	Miscible
Partition coefficient (n-octanol/water)	log Pow: 5.78 The value mentioned relates to the active ingredient 2,4-D-ethylhexyl ester.
Other information	Combustible liquid

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) < 2,000 mg/kg
Acute inhalation toxicity	LC50 (rat) > 5 mg/l Exposure time: 4 h
Acute dermal toxicity	LD50 (rat) > 2,000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	No eye irritation (rabbit)
Sensitization	sensitizing (guinea pig)

Further information

Information given is based on data on the components and the toxicology of similar products
When inhaled in larger quantities, the solvent vapours cause a narcotic effect.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects



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Toxicity to fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) > 100 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient 2,4-D.
Toxicity to daphnia	EC50 (<i>Daphnia</i>) 5.2 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient 2,4-D-ethylhexyl ester.
Toxicity to algae	EC50 (<i>Skeletonema costatum</i>) 0.23 mg/l The value mentioned relates to the active ingredient 2,4-D-ethylhexyl ester.
Toxicity to other organisms	LD50 (Mallard duck) 663 mg/kg The value mentioned relates to the active ingredient 2,4-D-ethylhexyl ester.

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. (2,4-D ETHYLHEXYL ESTER SOLUTION)
Special Provision	

IMDG

UN-No	3082
Class	9
Packaging group	III
Marine pollutant	Marine pollutant
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D ETHYLHEXYL ESTER SOLUTION)



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IATA

UN-No	3082
Class	9
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D ETHYLHEXYL ESTER SOLUTION)

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 (2,4-D ETHYLHEXYL ESTER)

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:

- 2,4-D
- Solvent naphtha (petroleum), heavy arom.

Symbol(s)

Xn	Harmful
N	Dangerous for the environment

R-phrases(s)

R22	Harmful if swallowed.
R43	May cause sensitization by skin contact.
R50/53	Very 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.
R67	Vapours may cause drowsiness and dizziness.

S-phrases(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.
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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)

16. OTHER INFORMATION



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Further information

Text of R phrases mentioned in Section 2:

R10	Flammable.
R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage 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.
R51/53	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.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

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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