



XANADU EW225 4X5L JUG GB

Version 1 / GB
10200001722

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Revision Date: 22.05.2006
Print Date: 21.06.2006

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

Product information

Trade name XANADU EW225 4X5L JUG GB
Product code (UVP) 05923565
Usage herbicide
Company Bayer Environmental Science
230 Cambridge Science Park
Milton Road
Cambridge
Cambridgeshire CB4 0WB
Great Britain
Telephone +44(0)1223 226500
Telefax +44(0)1223 426240
Emergency telephone number 0800-220876 (UK 24 hr)
+44(0)1603-242424 (Overseas 24 hr)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Emulsion, oil in water (EW)
Glyphosate/Diuron 100:125 g/l

Hazardous components

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Glyphosate, isopropylamine salt	38641-94-0 254-056-8	N	R51/53	12.80
Diuron	330-54-1 206-354-4	Xn, N	R22, R40, R48/22, R50/53	11.80

3. HAZARDS IDENTIFICATION

Risk advice to man and the environment

Limited evidence of a carcinogenic effect.
Harmful: 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 clothing immediately and dispose of safely.

Inhalation

Move to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.

Skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and water. If



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symptoms persist, call a physician.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion

Do not induce vomiting. Rinse mouth.

Notes to Physician

Symptoms

Systemic.: The absorption of this product into the body may lead to the formation of methaemoglobine that, in sufficient concentration, causes cyanosis., If large amounts are ingested, the following symptoms may occur.: dizziness, headache

Risks

Danger of formation of methaemoglobin.

Treatment

Local treatment:
Treat symptomatically.

Treatment

Systemic treatment:
In the event of a mouthful or more being ingested, the following measures should be considered:
Monitoring of: cardiac, kidney and red blood cell count.
Observe specific parameters: methaemoglobinaemia and serum potassium.
If ingested, irrigate the stomach using activated charcoal in addition.
If methaemoglobin level is less than 20%, administer 100% oxygen. If methaemoglobin level is greater than 20% treat with 100% oxygen and slowly give 1% Methylene Blue/Toluidine Blue solution intravenously, 1-2 mg/kg body weight.
Contraindications: alcohol.
Recovery: spontaneous.
Give oxygen or artificial respiration if needed.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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 diking area with sand or earth.

6. ACCIDENTAL RELEASE MEASURES



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Personal Precautions

Keep people away from and upwind of spill/leak.
Avoid contact with spilled product or contaminated surfaces.
When dealing with a spillage do not eat, drink or smoke.

Environmental Precautions

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, diatomaceous earth or a proprietary absorbent material).
Keep in suitable, closed containers for disposal.
Clean floors and contaminated objects with plenty of water.

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.
Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion

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

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.
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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.



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Personal protective equipment

Respiratory Protection	No personal respiratory protective equipment normally required. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.
Hand Protection	Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.
Eye protection	Eye protection not required when used as recommended.
Skin and body protection	Wear standard coverall and Type 6 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.
Hygiene measures	When using, do not eat, drink or smoke. Remove soiled clothing immediately. Remove soaked protective clothing immediately. Clean hands and face at work intervals and after work. Work in an adequately ventilated room.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Colour white

Safety data

pH	3.6 at 20 g/l
Flash Point	> 100 °C
Density	ca. 1.05 g/cm ³ at 20 °C
Water Solubility	miscible

10. STABILITY AND REACTIVITY

Conditions to Avoid	Extremes of temperature and direct sunlight.
Materials to avoid	None.

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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) > 5,000 mg/kg
Acute Dermal Toxicity LD50 (rat) > 2,000 mg/kg
Skin Irritation Slight irritant effect - does not require labelling. (rabbit)
Eye Irritation No eye irritation. (rabbit)
Sensitization Non-sensitizing. (guinea pig)
OECD Test Guideline 406, Buehler test

Assessment Carcinogenicity

A possible carcinogenic effect is indicated at high doses in animal studies on the active substance diuron.

12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to Fish LC50 (Rainbow trout (*Oncorhynchus mykiss*)) 14.7 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient diuron.
Toxicity to Fish LC50 (Rainbow trout (*Oncorhynchus mykiss*)) > 1,000 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient glyphosate-isopropylamine salt.
Toxicity to daphnia EC50 (Daphnia) 1.4 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient diuron.
Toxicity to daphnia EC50 (Daphnia) 930 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient glyphosate-isopropylamine salt.
Toxicity to algae EC50 (*Scenedesmus subspicatus*) 0.022 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient diuron.

13. DISPOSAL CONSIDERATIONS

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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.

Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

Contaminated packaging

Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times.

Add washings to sprayer at time of filling.

Dispose of empty and cleaned packaging safely.

Large containers (> 25 l or > 25 kg) should not be rinsed or re-used for any other purpose.

Return large containers to supplier.

Follow advice on product label and/or leaflet.

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. (DIURON SOLUTION)

IMDG

UN-No	3082
Class	9
Packaging group	III
EmS	F-A , S-F
Marine pollutant	Marine pollutant
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIURON SOLUTION)

IATA

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

UK 'Carriage' Regulations

UN-No	3082
Labels	9
Packaging group	III
Hazard no.	90
Emergency action code	3Z
Description of the goods	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.



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(DIURON SOLUTION)

15. REGULATORY INFORMATION

This product has been classified in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3 and any subsequent amendments.

Classification:

Labelling according to EC Directives

Hazardous components which must be listed on the label:

- Glyphosate
- Diuron

Symbol(s)

Xn	Harmful
N	Dangerous for the environment

R-phrase(s)

R40	Limited evidence of a carcinogenic effect.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R51/53	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.
S36/37	Wear suitable protective clothing and gloves.
S57	Use appropriate container to avoid environmental contamination.

Exceptional labelling

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.
R40	Limited evidence of a carcinogenic effect.
R48/22	Harmful: 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.
R51/53	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



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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 are highlighted in the margin. This version replaces all previous versions.