

**DUET®**

Version 2.2

Revision Date 24.06.2004

Ref. 130000010907

This SDS adheres to the standards and regulatory requirements of Great Britain and may not meet the regulatory requirements in other countries.

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

Product name : DUET®

Use of the Substance/Preparation : herbicide

Company : Du Pont (U.K.) Limited
Wedgwood Way
SG1 4QN Stevenage

Telephone : +4401438734450

Telefax :

Emergency telephone number : +44-(0)2871-861.313

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation : Soluble concentrate containing Dichlorprop-P and loxynil as sodium salts

Chemical Name	CAS-No.	EC-No.	Classification	Concentration [%]
sodium [®] -2-(2,4-dichlorophenoxy)propionate	119299-10-4	413-340-3	Xn; R22 Xi; R38 -R41 R43	>= 50 - <= 60
sodium 4-hydroxy-3,5-diiodophenylcyanide	2961-62-8		T; R25 Xn; R21 N; R50/53 Repr.Cat.3; R63	>= 10 - <= 20

For the full text of the R phrases mentioned in this Section, see Section 16.

3. HAZARDS IDENTIFICATION

Harmful if swallowed.
Risk of serious damage to eyes.
Possible risk of harm to the unborn child.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

General advice : If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. For specialist advice physicians should contact the National Poisons Information Service, (24-hr), Tel: 0870-600-6266.

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| Inhalation | : | Remove to fresh air. Oxygen or artificial respiration if needed. Consult a physician after significant exposure. |
| Skin contact | : | Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. If skin irritation persists, call a physician. |
| Eye contact | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical advice. |
| Ingestion | : | Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice. If swallowed, seek medical advice immediately and show this container or label. |

5. FIRE-FIGHTING MEASURES

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| 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, |
| Special protective equipment for fire-fighters | : | Wear self contained breathing apparatus for fire fighting if necessary. |

6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions | : | Wear personal protective equipment. Avoid contact with skin, eyes and clothing. |
| Environmental precautions | : | Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained. |
| Methods for cleaning up | : | Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Clean contaminated surface thoroughly. |

7. HANDLING AND STORAGE**Handling**

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| Advice on safe handling | : | Use only in well-ventilated areas. Avoid inhalation of vapour or mist. Smoking, eating and drinking should be prohibited in the application area. |
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Storage

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| Requirements for storage areas and containers | : | Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Store in original container. Keep container tightly closed in a dry and well-ventilated place. |
| Storage temperature | : | 0 - 40 °C |

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Personal protective equipment**

- Hand protection : Material: nitrile rubber
Glove thickness: 0,4 - 0,7 mm
Wearing time: 480 min
Do not wear cotton or leather gloves., Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Eye protection : safety glasses goggles
- Skin and body protection : lightweight protective clothing
- Hygiene measures : When using, do not eat, drink or smoke. Wash contaminated clothing before re-use. Keep working clothes separately. General industrial hygiene practice.
- Protective measures : All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : liquid,
- Colour : clear, brown,
- Odour : characteristic,
- pH : ca. 8
- Flash point : 108 °C
- Explosive properties : Not explosive
- Density : 1,3 g/cm³
- Water solubility : , completely miscible

10. STABILITY AND REACTIVITY

- Materials to avoid : metals,
- Hazardous decomposition products : Under fire conditions:, Carbon oxides, nitrogen oxides (NO_x),
- Hazardous reactions : No decomposition if stored and applied as directed.

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11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50/rat : 700 - 1 000 mg/kg
Acute inhalation toxicity	:	LC50/4 h/rat : 3,38 mg/l
Acute dermal toxicity	:	LD50/rat : > 2 000 mg/kg
Skin irritation	:	No skin irritation
Eye irritation	:	Mild eye irritation
Sensitization	:	Did not cause sensitization on laboratory animals.

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

Biodegradability : Readily biodegradable.

Ecotoxicity effects

Toxicity to fish : LC50/96 h/Rainbow trout: 31 mg/l

Toxicity to algae : EC50/72 h/Algae: 330 mg/l

Aquatic toxicity : EC50/24 h/Daphnia: 17 mg/l

13. DISPOSAL CONSIDERATIONS

Product	:	If recycling is not practicable, dispose of in compliance with local regulations. Do not contaminate ponds, waterways or ditches with chemical or used container.
Contaminated packaging	:	Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

14. TRANSPORT INFORMATION

Further Information : Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION**Labelling according to EEC Directive**

Symbol(s) : Xn Harmful

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Hazardous components:	sodium ®-2-(2,4-dichlorophenoxy)propionate	
R-phrase(s)	: R22 R41 R63 R52/53	Harmful if swallowed. Risk of serious damage to eyes. Possible risk of harm to the unborn child. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S 2 S13 S20/21 S36/37/39 S46 S60	Keep out of reach of children. Keep away from food, drink and animal feedingstuffs. When using, do not eat, drink or smoke. Wear suitable protective clothing, gloves and eye/face protection. If swallowed, seek medical advice immediately and show this container or label. This material and/or its container must be disposed of as hazardous waste.
Other regulations	: The product is classified as dangerous in accordance with Directive 1999/45/EC.	

16. OTHER INFORMATION**Text of R phrases mentioned in Section 2**

R21	Harmful in contact with skin.
R22	Harmful if swallowed.
R25	Toxic if swallowed.
R38	Irritating to 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.
R63	Possible risk of harm to the unborn child.

Further information

Before use read DuPont's safety information.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.