

**PISTOL SC290 4X5L BOT GB**Version 1 / GB  
1020000017461/7  
Revision Date: 21.04.2006  
Print Date: 14.02.2007**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name PISTOL SC290 4X5L BOT GB  
Product code (UVP) 05923883, 06424104  
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**

Suspension concentrate (=flowable concentrate)(SC)  
Diflufenican/Glyphosate 40:250 g/l

**Hazardous components**

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Diflufenican	83164-33-4		R52/53	3.80
Glyphosate, isopropylamine salt	38641-94-0 254-056-8	N	R51/53	45.50
1,2-Propanediol	57-55-6 200-338-0			> 1.00 - < 5.00
Isotridecanol	68526-86-3 271-235-6	Xi, N	R38, R50/53	> 0.10 - < 1.00

**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****Skin contact**

Take off contaminated clothing and shoes immediately. Wash off thoroughly with plenty of water and soap, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.



**PISTOL SC290 4X5L BOT GB**

Version 1 / GB  
102000001746

2/7  
Revision Date: 21.04.2006  
Print Date: 14.02.2007

**Eye contact**

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.

**Ingestion**

Do not induce vomiting. Rinse mouth, ingest activated charcoal. Obtain medical attention.

**Notes to Physician**

**Symptoms**

nausea, vomiting, diarrhoea, salivation, If large amounts are ingested, the following symptoms may occur: abnormally decreased blood volume (hypovolaemia), acidosis, Liver disorders, Kidney disorders

**Treatment**

Treat symptomatically.  
Gastric lavage, then charcoal (carbo medicalis) and sodium sulfate.  
Early dialysis (h(a)emoperfusion)  
Monitor fluid balance.

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**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.

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**6. ACCIDENTAL RELEASE MEASURES**

**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).

**PISTOL SC290 4X5L BOT GB**Version 1 / GB  
1020000017463/7  
Revision Date: 21.04.2006  
Print Date: 14.02.2007**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.

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**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

No special precautions required.

**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.

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**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.

**Components with workplace control parameters**

Components	CAS-No.	Control parameters	Update	Basis
1,2-Propanediol (Particulate.)	57-55-6	10 mg/m <sup>3</sup> (TWA)	2005	EH40 WEL
1,2-Propanediol (Vapor and particulates.)	57-55-6	474 mg/m <sup>3</sup> / 150 ppm (TWA)	2005	EH40 WEL

**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

**PISTOL SC290 4X5L BOT GB**Version 1 / GB  
1020000017464/7  
Revision Date: 21.04.2006  
Print Date: 14.02.2007

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                      Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

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 soaked protective clothing immediately.  
Remove soiled clothing immediately.  
Clean hands and face at work intervals and after work.  
Work in an adequately ventilated room.

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**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form                                      liquid, suspension  
Colour                                    white  
Odour                                     aromatic

**Safety data**

Density                                   ca. 1.17 g/cm<sup>3</sup> at 20 °C  
Water Solubility                       miscible  
Viscosity, dynamic                     30 - 60 mPa.s

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**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.

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**11. TOXICOLOGICAL INFORMATION**

Acute Oral Toxicity                    LD50 (rat) > 2,000 mg/kg  
Acute Dermal Toxicity                 LD50 (rat) > 2,000 mg/kg  
Skin Irritation                         Slight irritant effect - does not require labelling. (rabbit)

**PISTOL SC290 4X5L BOT GB**Version 1 / GB  
1020000017465/7  
Revision Date: 21.04.2006  
Print Date: 14.02.2007

Eye Irritation	No eye irritation. (rabbit)
Sensitization	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test

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

Bioaccumulation                      Oncorhynchus mykiss (rainbow trout)  
Bioconcentration factor (BCF): 1,596  
The value mentioned relates to the active ingredient diflufenican.

**Ecotoxicity effects**

Toxicity to Fish                      LC50 (Oncorhynchus mykiss (rainbow trout)) > 109 µg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient diflufenican.  
The low solubility of the product does not allow to reach toxic concentrations for fishes.

Toxicity to Fish                      LC50 (Rainbow trout (Oncorhynchus mykiss)) 86 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient glyphosate-isopropylamine salt.

Toxicity to daphnia                      EC50 (Water flea (Daphnia magna)) > 240 µg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient diflufenican.  
No acute toxicity was observed at its limit of water solubility.

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) 0.018 mg/l  
Exposure time: 72 h

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

**PISTOL SC290 4X5L BOT GB**Version 1 / GB  
102000017466/7  
Revision Date: 21.04.2006  
Print Date: 14.02.2007**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

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**14. TRANSPORT INFORMATION****ADR/RID/ADNR**

UN-No	<b>3082</b>
Labels	9
Packaging group	III
Hazard no.	90
Description of the goods	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFLUFENICAN SOLUTION)

**IMDG**

UN-No	<b>3082</b>
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. (DIFLUFENICAN SOLUTION )

**IATA**

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

**UK 'Carriage' Regulations**

UN-No	<b>3082</b>
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. (DIFLUFENICAN SOLUTION)

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**15. REGULATORY INFORMATION**

This product has been classified in accordance with The Chemicals (Hazard Information and



## PISTOL SC290 4X5L BOT GB

Version 1 / GB  
102000001746

7/7  
Revision Date: 21.04.2006  
Print Date: 14.02.2007

Packaging for Supply) Regulations 2002: CHIP 3 and any subsequent amendments.

Classification:

Labelling according to EEC Directive

Hazardous components which must be listed on the label:

- Diflufenican
- Glyphosate, isopropylamine salt

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 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: II (Moderately hazardous)

## 16. OTHER INFORMATION

### Further information

Text of R phrases mentioned in Section 2:

R38 Irritating to skin.

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.

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