

**DIVIDEND**

Version 4

Revision Date 25.08.2005

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**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****PRODUCT INFORMATION**

**Product name** : **DIVIDEND**

**Design Code** : A9142G

**Use** : Fungicide, Seed treatment

**Company** : Syngenta Crop Protection AG  
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**2. COMPOSITION/INFORMATION ON INGREDIENTS****Hazardous components**

Chemical Name	CAS-No.	EC-No.	Symbol(s)	R-phrase(s)	Concentration
difenoconazole	119446-68-3		Xn, N	R22 R50/53	2.8 % W/W
1,2-propanediol	57-55-6	200-338-0			1 - 5 % W/W
poly(oxy-1,2-ethane diyl), alpha-sulfo-omega-[tris(1-phenylethyl)phenoxy]-, ammonium salt	119432-41-6		Xi	R36 R52/53	1 - 5 % W/W
oxirane, methyl-, polymer with oxirane, monobutyl ether	9038-95-3		Xn, N	R22 R41 R50	1 - 5 % W/W

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

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**3. Hazards identification**

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

**4. FIRST AID MEASURES**

- General advice** : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.
- Inhalation** : Remove to fresh air.  
If breathing is irregular or stopped, administer artificial respiration.  
Keep patient warm and at rest.  
Call a physician or Poison Control Center immediately.
- Skin contact** : Take off all contaminated clothing immediately.  
Wash off immediately with plenty of water.  
If skin irritation persists, call a physician.  
Wash contaminated clothing before re-use.
- Eye contact** : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Remove contact lenses.  
Immediate medical attention is required.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label.  
Do not induce vomiting.
- Medical advice** : There is no specific antidote available. Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

- Suitable extinguishing media** : Extinguishing media - small fires  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Extinguishing media - large fires  
alcohol-resistant foam  
water spray
- Extinguishing media which must not be used for safety reasons** : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during fire fighting** : As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).  
Exposure to decomposition products may be a hazard to health.
- Special protective equipment for fire-fighters** : In the event of fire, wear self-contained breathing apparatus.

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**Further information** : Do not allow run-off from fire fighting to enter drains or water courses.  
Cool closed containers exposed to fire with water spray.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions** : Refer to protective measures listed in sections 7 and 8.

**Environmental precautions** : Prevent further leakage or spillage if safe to do so.  
Do not flush into surface water or sanitary sewer system.

**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).

**Additional advice** : If the product contaminates rivers and lakes or drains inform respective authorities.

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**7. HANDLING AND STORAGE****HANDLING**

**Advice on safe handling** : No special technical protective measures required.  
No special handling advice required.  
Avoid contact with skin and eyes.  
When using, do not eat, drink or smoke.  
For personal protection see section 8.

**STORAGE**

**Requirements for storage areas and containers** : No special storage conditions required.  
Keep containers tightly closed in a dry, cool and well-ventilated place.  
Keep out of the reach of children.  
Keep away from food, drink and animal feed.

**Other data** : Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

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### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Components with workplace control parameters

Components	Exposure limit(s)	Value type	Source
difenoconazole	8 mg/m <sup>3</sup>	8 h TWA	SYNGENTA
propane-1,2-diol	10 mg/m <sup>3</sup> 150 ppm 470 mg/m <sup>3</sup>	Particulates Total (vapour & particulates)	8 h TWA UK HSE

#### ENGINEERING MEASURES

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

If airborne mists or vapors are generated, use local exhaust ventilation controls.

Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.

Where necessary, seek additional occupational hygiene advice.

#### PERSONAL PROTECTIVE EQUIPMENT

**Protective measures** : The use of technical measures should always have priority over the use of personal protective equipment.  
When selecting personal protective equipment, seek appropriate professional advice.  
Personal protective equipment should be certified to appropriate standards.

**Respiratory protection** : No personal respiratory protective equipment normally required.  
A particulate filter respirator may be necessary until effective technical measures are installed.

**Hand protection** : Chemical resistant gloves are not usually required.  
Select gloves based on the physical job requirements.

**Eye protection** : Eye protection is not usually required.  
Follow any site specific eye protection policies.  
Eye/face protection should be certified to EN 166.

**Skin and body protection** : No special protective equipment required.  
Select skin and body protection based on the physical job requirements.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form** : liquid

**Colour** : light red to dark red

**pH** : 5 - 9 at 1 % w/v

**Oxidizing properties** : not oxidizing

**Explosive properties** : Not explosive

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<b>Density</b>	:	1.03 - 1.07 g/ml at 20 °C
<b>Viscosity, dynamic</b>	:	42.1 - 401 mPa.s at 20 °C
	:	38.0 - 375 mPa.s at 40 °C
<b>Surface tension</b>	:	34.6 mN/m at 20 °C

**10. STABILITY AND REACTIVITY**

<b>Hazardous decomposition products</b>	:	Combustion or thermal decomposition will evolve toxic and irritant vapors.
<b>Hazardous reactions</b>	:	None known. Hazardous polymerization does not occur. Stable under normal conditions.

**11. TOXICOLOGICAL INFORMATION**

<b>Acute oral toxicity</b>	:	LD50 Rat, > 3,000 mg/kg
<b>Acute inhalation toxicity</b>	:	LC50 male and female Rat, > 6.319 mg/l, 4 h
<b>Acute dermal toxicity</b>	:	LD50 Rat, > 4,000 mg/kg
<b>Skin irritation</b>	:	Rabbit: non irritant assessment according to 93/21/EEC
<b>Eye irritation</b>	:	Rabbit: non irritant assessment according to 93/21/EEC
<b>Sensitization</b>	:	Guinea Pig not sensitizing assessment according to 93/21/EEC
<b>Long term toxicity</b>	:	Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

**12. ECOLOGICAL INFORMATION****ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)**

<b>Bioaccumulation</b>	:	Difenoconazole has high potential to bioaccumulate.
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- Stability in water** : Difenoconazole is persistent in water
- Stability in soil** : Difenoconazole is not persistent in soil.
- Mobility** : Difenoconazole has low mobility in soil.

**ECOTOXICITY EFFECTS**

- Toxicity to fish** : LC50 *Oncorhynchus mykiss* (Rainbow trout), 37.5 mg/l , 96 h
- Toxicity to aquatic invertebrates** : EC50 *Daphnia magna* (water flea), 19 mg/l , 48 h
- Toxicity to algae** : ERC50 *Pseudokirchneriella subcapitata* (green algae), 112 mg/l , 72 h

**13. DISPOSAL CONSIDERATIONS**

- Product** : Do not contaminate ponds, waterways or ditches with chemical or used container.  
Do not dispose of waste into sewer.  
Where possible recycling is preferred to disposal or incineration.  
If recycling is not practicable, dispose of in compliance with local regulations.
- Contaminated packaging** : Empty remaining contents.  
Triple rinse containers.  
Empty containers should be taken for local recycling or waste disposal.  
Do not re-use empty containers.

**14. TRANSPORT INFORMATION****Land transport***ADR/ RID:*

Regulation: Not dangerous goods

**Sea transport***IMDG:*

UN-No: 3082

Class: 9

Danger Label Number : 9

Packaging group: III

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
( DIFENOCONAZOLE )

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Marine pollutant : Marine pollutant

**Air transport***IATA-DGR*

Regulation: Not dangerous goods

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**15. REGULATORY INFORMATION****Labelling according to EC Directives**

**R-phrase(s)** : R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-phrase(s)** : S 2 Keep out of the reach of children.  
S13 Keep away from food, drink and animal feedingstuffs.  
S20/21 When using do not eat, drink or smoke.  
S35 This material and its container must be disposed of in a safe way.  
S57 Use appropriate container to avoid environmental contamination.

**Exceptional labelling of special preparations** : To avoid risks to man and the environment, comply with the instructions for use.

**Note** : The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

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**16. OTHER INFORMATION****Further information**

Text of R phrases mentioned in Section 2:

<b>R22</b>	Harmful if swallowed.
<b>R36</b>	Irritating to eyes.
<b>R41</b>	Risk of serious damage to eyes.
<b>R50</b>	Very toxic to aquatic organisms.
<b>R50/53</b>	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>R52/53</b>	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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