



## ACANTO PLUS

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

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

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### Product information

Product name : ACANTO PLUS

Synonyms : STINGER (M)  
: DPX-PZX74 280SC  
: REVELLER 280SC  
: Approach 280sc  
: B12330271

Use of the Substance/Mixture : Fungicide

Company : DuPont de Nemours South Africa (Pty) Ltd  
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### 2. HAZARDS IDENTIFICATION

Harmful by inhalation.

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

Possible risk of harm to the unborn child.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	EC-No.	Classification	Concentration [%]
Picoxystrobin	117428-22-5		T; R23 N; R50/53 Xi; R36 Xn; R40	>= 10 - < 20 18,5
Cyproconazole	94361-06-5		Repr.Cat.3; R63 Xn; R22 N; R50 -R53	>= 5 - < 10 7,63
Alkylnaphthalenesulfonic acid, sodium salt/formaldehyde	68425-94-5		Xi; R36/38	>= 0 - < 10 2,2088



## ACANTO PLUS

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

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

### 4. FIRST AID MEASURES

- General advice : Never give anything by mouth to an unconscious person.
- Inhalation : Move to fresh air. Consult a physician after significant exposure. Artificial respiration and/or oxygen may be necessary.
- Skin contact : Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before re-use.
- Eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes. If eye irritation persists, consult a specialist.
- Ingestion : Obtain medical attention. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If victim is conscious: Rinse mouth with water.
- Notes to physician**
- Symptoms : No cases of human intoxication are known and the symptoms of experimental intoxication are not known.
- Treatment : Treat symptomatically.

### 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray, Alcohol-resistant foam, Dry chemical, Carbon dioxide (CO<sub>2</sub>),
- Extinguishing media which shall not be used for safety reasons : High volume water jet, (contamination risk),
- Specific hazards during firefighting : Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO<sub>2</sub>) nitrogen oxides
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- (on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray.

### 6. ACCIDENTAL RELEASE MEASURES



## ACANTO PLUS

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

- Personal precautions** : Control access to area. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ventilate spill area. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions** : Use appropriate container to avoid environmental contamination. Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up** : Clean-up methods - small spillage Soak up with inert absorbent material. Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Clean-up methods - large spillage Prevent further leakage or spillage. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Large spills should be collected mechanically (remove by pumping) for disposal. Collect leaking liquid in sealable (metal/plastic) containers. Collect and contain contaminated absorbent and dike material for disposal.
- Additional advice** : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

## 7. HANDLING AND STORAGE

### Handling

- Advice on safe handling** : Use only according to our recommendations. Wear personal protective equipment. For personal protection see section 8. Use only clean equipment. Provide adequate ventilation. Do not breathe vapours or spray mist. When opening containers, avoid breathing vapours that may be emanating. Prepare the working solution as given on the label(s) and/or the user instructions. Use prepared working solution as soon as possible - Do not store. To avoid spills during handling keep bottle on a metal tray. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Never return unused material to storage receptacle. Avoid exceeding of the given occupational exposure limits (see section 8).
- Advice on protection against fire and explosion** : Keep away from heat and sources of ignition. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.

### Storage

- Requirements for storage areas and containers** : Store in original container. Keep in properly labelled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.
- Advice on common storage** : No special restrictions on storage with other products.



## ACANTO PLUS

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

Other data : Stable under recommended storage conditions.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Engineering measures

Ensure adequate ventilation, especially in confined areas. Contains no substances with occupational exposure limit values.

#### Personal protective equipment

- Respiratory protection : Manufacturing and processing work: Half mask with a particle filter FFP2 (EN149)
- Respiratory protection : Mixer and loaders must wear: Half mask with a particle filter FFP2 (EN149)
- Respiratory protection : Spray application - outdoor: Tractor / sprayer with hood: No personal respiratory protective equipment normally required.
- Respiratory protection : Tractor / sprayer without hood: Half mask with a particle filter P2 (EN 143).
- Respiratory protection : Backpack / knapsack sprayer: Half mask with a particle filter P2 (EN 143).
- Respiratory protection : Closed tunnel spray application: No personal respiratory protective equipment normally required.
- Hand protection : Material: Nitrile rubber  
 Glove thickness: 0,4 - 7 mm  
 Glove length : Gauntlets of 35 cm long or longer.  
 Wearing time: > 480 min  
 The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it., Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time., The suitability for a specific workplace should be discussed with the producers of the protective gloves., Gloves must be inspected prior to use., Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough., Gauntlets of 35 cm long or longer shall be worn over the combination sleeve., Before removing gloves clean them with soap and water.
- Eye protection : Safety glasses with side-shields conforming to EN166
- Skin and body protection : Manufacturing and processing work: Full protective clothing Type 6 (EN 13034)  
 Mixer and loaders must wear: Full protective clothing Type 6 (EN 13034)  
 Rubber apron Nitrile rubber boots (EN 13832-3 / EN ISO 20345).  
 Spray application - outdoor: Tractor / sprayer with hood: No personal body protection normally required.  
 Tractor / sprayer without hood: Full protective clothing Type 4 (EN 14605) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).

**ACANTO PLUS**

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

Backpack / knapsack sprayer: Full protective clothing Type 4 (EN 14605) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).

Closed tunnel spray application: No personal body protection normally required.

When exceptional circumstances require an access to the treated area before the end of re-entry periods, wear full protective clothing Type 6 (EN 13034), nitrile rubber gloves class 3 (EN 374) and nitrile rubber boots (EN 13832-3 / EN ISO 20345).

To optimize the ergonomics it may be recommended to use cotton underwear when wearing some fabrics. Take advice from supplier.

Garment materials that are resistant to both water vapour and air will maximise wearing comfort. Materials should be robust to maintain the integrity and barrier in use.

The permeation resistance of the fabric must be verified independently of the « type » protection recommended, to ensure an appropriate performance level of the material adequate to the corresponding agent and type of exposure.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing. Keep working clothes separately. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Remove clothing/PPE immediately if material gets inside. For environmental protection remove and wash all contaminated protective equipment before re-use. Dispose of rinse water in accordance with local and national regulations.

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. Only protected handlers may be in the area during application.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form : liquid,

Colour : off-white,

Odour : sweet,

pH : 7 at 10 g/l ( 25 °C)

Melting point/range : not applicable

Boiling point/boiling range : Not available for this mixture.



## ACANTO PLUS

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

Flash point	: > 97 °C
Flammability (solid, gas)	: The product is not flammable.
Thermal decomposition	: Not available for this mixture.,
Autoignition temperature	: 455 °C
Oxidizing properties	: The product is not oxidizing.
Explosive properties	: Not explosive
Lower explosion limit / lower flammability limit	: , Not available for this mixture.
Upper explosion limit / upper flammability limit	: , Not available for this mixture.
Vapour pressure	: , Not available for this mixture.
Density	: 1,12 g/cm <sup>3</sup>
Water solubility	: , miscible
Partition coefficient: n- octanol/water	: , not applicable
Viscosity, dynamic	: 109 - 538 mPa.s at 20 °C
Relative vapour density	: , Not available for this mixture.
Evaporation rate	: Not available for this mixture.
Phys.-chem./other information	: No other data to be specially mentioned.

### 10. STABILITY AND REACTIVITY

Conditions to avoid	: To avoid thermal decomposition, do not overheat. Protect from frost.
Materials to avoid	: No materials to be especially mentioned.
Hazardous decomposition products	: Thermal decomposition can lead to release of irritating gases and vapours.
Hazardous reactions	: No dangerous reaction known under conditions of normal use. Polymerization will not occur. No decomposition if stored and applied as directed.

### 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50/ ratfemale: > 2 000 mg/kg Method: OECD Test Guideline 401 (Data on the product itself) Information source: Internal study report
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**ACANTO PLUS**

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

Acute inhalation toxicity	:	LC50/ 4 h / rat : 7,34 mg/l Method: OECD Test Guideline 403 (Data on the product itself) Information source: Internal study report
Acute dermal toxicity	:	LD50/ rat > 4 000 mg/kg Method: OECD Test Guideline 402 (Data on the product itself) Information source: Internal study report
Skin irritation	:	rabbit Result: No skin irritation Method: OECD Test Guideline 404 (Data on the product itself) Information source: Internal study report
Eye irritation	:	rabbit Result: No eye irritation Method: OECD Test Guideline 405 (Data on the product itself) Information source: Internal study report
Sensitisation	:	Local lymph node test mice Result: Causes skin sensitization. Method: OECD Test Guideline 429 (Data on the product itself) Information source: Internal study report
Mutagenicity assessment Picoxystrobin Cyproconazole	:	Overall weight of evidence indicates that the substance is not mutagenic. Evidence suggests this substance does not cause genetic damage in animals., Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Carcinogenicity assessment	:	
• Picoxystrobin	:	The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions., An increased incidence of benign tumours was observed in laboratory animals.
• Cyproconazole	:	An increased incidence of tumours was observed in laboratory animals.
Toxicity to reproduction assessment	:	
• Picoxystrobin	:	Animal testing showed no reproductive toxicity.
• Cyproconazole	:	Animal testing showed no reproductive toxicity.

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

Biodegradability	:	Not readily biodegradable. Estimation based on data obtained on active ingredient.
Bioaccumulation	:	Does not bioaccumulate. Estimation based on data obtained on active ingredient.

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

**Ecotoxicity effects**



## ACANTO PLUS

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

- Toxicity to fish : LC50/ 96 h/ Oncorhynchus mykiss (rainbow trout) :: 0,27 mg/l  
Method: OECD Test Guideline 203  
(Data on the product itself) Information source: Internal study report
- Toxicity to algae : / ErC50/ 72 h/ Pseudokirchneriella subcapitata (green algae): 0,94 mg/l  
Method: OECD Test Guideline 201  
(Data on the product itself) Information source: Internal study report
- Toxicity to daphnia : static test / EC50/ 48 h/ Daphnia magna (Water flea): 0,058 mg/l  
Method: OECD Test Guideline 202  
(Data on the product itself) Information source: Internal study report

### Further information on ecology

- Additional ecological information : No other ecological effects to be specially mentioned See product label for additional application instructions relating to environmental precautions.

## 13. DISPOSAL CONSIDERATIONS

- Product : In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate ponds, waterways or ditches with chemical or used container.
- Contaminated packaging : Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

### ADR

- Class: 9  
Packaging group: III  
Classification Code: M6  
HI No.: 90  
UN number: 3082  
Labelling No.: 9  
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Cyproconazole, Picoxystrobin)

### IATA\_C

- Class: 9  
Packaging group: III  
UN number: 3082  
Labelling No.: 9  
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Cyproconazole, Picoxystrobin)

### IMDG

- Class: 9  
Packaging group: III  
UN number: 3082  
Labelling No.: 9  
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Cyproconazole, Picoxystrobin)

Marine pollutant: Marine pollutant.

Further information : DuPont internal recommendations and transport guidance:, ICAO / IATA cargo



**ACANTO PLUS**

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

aircraft only

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

Symbol(s)	: Xn N	Harmful Dangerous for the environment
Hazardous components:	Picoxystrobin Cyproconazole	
R-phrases(s)	: R20 R50/53 R63	Harmful by inhalation. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of harm to the unborn child.
S-phrases(s)	: S36/37 S57 S60	Wear suitable protective clothing and gloves. Use appropriate container to avoid environmental contamination. This material and its container must be disposed of as hazardous waste.

**16. OTHER INFORMATION****Text of R-phrases mentioned in Section 3**

R22	Harmful if swallowed.
R23	Toxic by inhalation.
R36	Irritating to eyes.
R36/38	Irritating to eyes and skin.
R40	Limited evidence of a carcinogenic effect.
R50	Very toxic to aquatic organisms.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	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., Take notice of the directions of use on the label.

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Significant change from previous version is denoted with a double bar.

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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The



## ACANTO PLUS

Version 0.0

Revision Date 18.11.2011

Ref.130000029884

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