

**GALILEO®**

Version 3.1

Revision Date 01.02.2010

Ref.130000031363

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/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Product name : GALILEO®

Synonyms : DPX-YT669 250SC
: C12103839

Use of the Substance/Mixture : Fungicide

Company : Du Pont (UK) Limited
Wedgwood Way
Stevenage, Herts. SG1 4QN
United Kingdom

Telephone : +44-1438-734.000

Emergency telephone : +44-(0)8456-006.640

E-mail address : sds-support@che.dupont.com

2. HAZARDS IDENTIFICATION

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	EC-No.	Classification	Concentration [%]
Picoxystrobin	117428-22-5		Xn; R20 N; R50/53	25
Poly(Dimethylnaphthalenesulfonic Acid/Formaldehyde/Methylnaphthalenesulfonic Acid) Sodium Salt	68425-94-5		Xi; R36/38	>= 1 - < 5

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.

For specialist advice physicians should contact the National Poisons Information Service, (24-hr), Tel: 0870-600-6266.

Inhalation : Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician.

**GALILEO®**

Version 3.1

Revision Date 01.02.2010

Ref.130000031363

- 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.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray, Alcohol-resistant foam, Dry chemical, Carbon dioxide (CO₂),
- Extinguishing media which shall not be used for safety reasons : High volume water jet, (contamination risk),
- Specific hazards during fire fighting : Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO₂) nitrogen oxides (NO_x)
- Special protective equipment for fire-fighters : 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

- 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,

**GALILEO®**

Version 3.1

Revision Date 01.02.2010

Ref.130000031363

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).

Storage

Requirements for storage areas and containers : Store in a place accessible by authorized persons only. Store in original container. Keep in properly labelled containers. 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 feedingstuffs.

Advice on common storage : No special restrictions on storage with other products.

Other data : Stable under recommended storage conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Type Form of exposure	Control parameters	Update	Basis
Propane-1,2-diol	57-55-6	TWA Particulate.	10 mg/m3	2007	EH40 WEL
		TWA Total vapour and particulates.	474 mg/m3 150 ppm	2007	EH40 WEL

**GALILEO®**

Version 3.1

Revision Date 01.02.2010

Ref.130000031363

Methanol	67-56-1	TWA	266 mg/m3 200 ppm	2007	EH40 WEL
		STEL	333 mg/m3 250 ppm	2007	EH40 WEL
		SKIN_DES		2007	EH40 WEL
		Can be absorbed through skin.			
		TWA	260 mg/m3 200 ppm	02 2006	EU ELV
		SKIN_DES		02 2006	EU ELV
Can be absorbed through skin.					

Engineering measures

Ensure adequate ventilation, especially in confined areas. Use sufficient ventilation to keep employee exposure below recommended limits.

Personal protective equipment

- Respiratory protection : Manufacturing and processing work: Half mask with vapour filter A2 (EN 141)
- Respiratory protection : Field and greenhouse application: Half mask with combination filter A2/P2 (EN 141)
- Hand protection : Material: Nitrile rubber
Glove thickness: 0,4 - 0,7 mm
Wearing time: 480 min
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.
- Eye protection : Safety glasses with side-shields conforming to EN166
- Skin and body protection : Manufacturing and processing work: Full protective clothing Type 5 + 6 (EN ISO 13982-2 / EN 13034)
Field and greenhouse application: Full protective clothing Type 3 (EN 14605)
- 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

**GALILEO®**

Version 3.1

Revision Date 01.02.2010

Ref.130000031363

- 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 : not significant,
- pH : 7,3 at 10 g/l (40 °C)
- Flash point : does not flash
- Autoignition temperature : , not auto-flammable
- Oxidizing properties : The product is not oxidizing.
- Explosive properties : Not explosive
- Density : 1,11 g/cm³ at 21 °C
- Water solubility : , miscible
- Viscosity, dynamic : 80 mPa.s at 25 °C

10. STABILITY AND REACTIVITY

- Conditions to avoid : Temperature : <= -5 °C
To avoid thermal decomposition, do not overheat. Protect from frost.
- Materials to avoid : No materials to be especially mentioned.
- Hazardous reactions : No dangerous reaction known under conditions of normal use. Polymerization will not occur. Heating can release hazardous gases. No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

- Acute oral toxicity : LD50/ rat: > 2 000 mg/kg Method: Directive 67/548/EEC, Annex V, B.1.
(Data on the product itself)

**GALILEO®**

Version 3.1

Revision Date 01.02.2010

Ref.130000031363

	Information source: Internal study report
Acute inhalation toxicity	
• Picoxystrobin	: LC50/ 4 h/ rat male: > 2,12 mg/l LC50/ 4 h/ rat female: 3,19 mg/l
Acute dermal toxicity	: LD50/ rat > 2 000 mg/kg Method: Directive 67/548/EEC, Annex V, B.3. (Data on the product itself) Information source: Internal study report
Skin irritation	: rabbit Result: No skin irritation Method: Directive 67/548/EEC, Annex V, B.4. (Data on the product itself) Information source: Internal study report
Eye irritation	: rabbit Result: No eye irritation Method: Directive 67/548/EEC, Annex V, B.5. (Data on the product itself) Information source: Internal study report
Sensitisation	: guinea pig Result: Animal test did not cause sensitization by skin contact. Method: Directive 67/548/EEC, Annex V, B.6. (Data on the product itself) Information source: Internal study report
Mutagenicity assessment	
• Picoxystrobin	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects., Did not show mutagenic effects in animal experiments.
Carcinogenicity assessment	
• Picoxystrobin	: Did not show carcinogenic effects in animal experiments.
Toxicity to reproduction assessment	
• Picoxystrobin	: Animal testing did not show any effects on fertility.

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

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

Toxicity to fish	: LC50/ 96 h/ Oncorhynchus mykiss (rainbow trout) :: 0,24 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): 1,2 mg/l Method: OECD Test Guideline 201 (Data on the product itself) Information source: Internal study report

**GALILEO®**

Version 3.1

Revision Date 01.02.2010

Ref.130000031363

Toxicity to daphnia : / EC50/ 48 h/ Daphnia magna (Water flea): 0,086 mg/l
 Method: OECD Test Guideline 202
 (Data on the product itself) Information source: Internal study report

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. (Picoxystrobin)

IMDG

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

Marine pollutant: Marine pollutant.

Further information : Not classified as dangerous in the meaning of air transport regulations., Optional classification as per IATA Special Provision A97.

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

Symbol(s) : Xn Harmful
 N Dangerous for the environment

Hazardous components: Picoxystrobin

R-phrase(s) : R20 Harmful by inhalation.
 R50/53 Very toxic 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.

**GALILEO®**

Version 3.1

Revision Date 01.02.2010

Ref.130000031363

S20/21	When using do not eat, drink or smoke.
S23	Do not breathe spray.
S35	This material and its container must be disposed of in a safe way.
S57	Use appropriate container to avoid environmental contamination.

Special labelling of certain mixtures : To avoid risks to man and the environment, comply with the instructions for use.

Sensitising components contains:
1,2-Benzisothiazol-3(2H)-one
May produce an allergic reaction.

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

R20	Harmful by inhalation.
R36/38	Irritating to eyes and skin.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information

Take notice of the directions of use on the label., Before use read DuPont's safety information.

® Registered trademark of E.I. du Pont de Nemours and Company

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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.