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# **POSTERITY FORTE**

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 S00084421952
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### **SECTION 1. IDENTIFICATION**

Product name : POSTERITY FORTE

Design code : A21461D

Manufacturer or supplier's details

Company name of supplier : Syngenta Crop Protection, LLC

Address : Post Office Box 18300 Greensboro NC 27419

United States of America (USA)

Telephone : 1 800 334 9481

Telefax : 1 336 632 2192

E-mail address : sds.requests@syngenta.com

Emergency telephone : 1 800 888 8372

Recommended use of the chemical and restrictions on use

Recommended use : Fungicide

Restrictions on use : General Use Pesticide

### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 4

Eye irritation : Category 2A

Reproductive toxicity : Category 2

Specific target organ toxicity

- repeated exposure

Category 2 (Bile duct)

**GHS** label elements

Hazard pictograms





Signal Word : Warning

Hazard Statements : H227 Combustible liquid.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs (Bile duct) through pro-

longed or repeated exposure.

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Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P210 Keep away from heat/ sparks/ open flames/ hot surfaces.

No smoking.

P260 Do not breathe mist or vapors.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

#### Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/ atten-

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

#### Storage:

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

#### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### Other hazards

None known.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

## Components

Chemical name	CAS-No.	Concentration (% w/w)		
propiconazole (ISO)	60207-90-1	11.6387		
octan-1-ol	111-87-5	>= 10 - < 20		
azoxystrobin (ISO)	131860-33-8	9.3156		
pydiflumetofen	1228284-64-7	6.9868		
propane-1,2,3-triol	56-81-5	>= 1 - < 5		

Actual concentration is withheld as a trade secret

### **SECTION 4. FIRST AID MEASURES**

General advice : Have the product container, label or Safety Data Sheet with

you when calling the emergency number, a poison control

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center or physician, or going for treatment.

If inhaled Take the victim into fresh air.

If breathing is irregular or stopped, administer artificial respira-

tion.

Keep patient warm and at rest.

Call a physician or poison control center immediately.

Take off all contaminated clothing immediately. In case of skin contact

> Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

In case of 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.

If swallowed If swallowed, seek medical advice immediately and show this

container or label.

Do NOT induce vomiting.

Most important symptoms

and effects, both acute and

delayed

Nonspecific

No symptoms known or expected. Causes serious eye irritation.

Suspected of damaging the unborn child.

May cause damage to organs through prolonged or repeated

exposure.

There is no specific antidote available. Notes to physician

Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Extinguishing media - small fires Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or car-

bon dioxide.

Extinguishing media - large fires

Alcohol-resistant foam

Unsuitable extinguishing

media

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 ingredients, fire

will produce dense black smoke containing hazardous prod-

ucts of combustion (see section 10).

Exposure to decomposition products may be a hazard to

health.

Flash back possible over considerable distance.

Hazardous combustion prod- :

ucts

Carbon oxides

Nitrogen oxides (NOx) Chlorine compounds Fluorine compounds

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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for fire-fighters

Special protective equipment : Wear full protective clothing and self-contained breathing ap-

paratus.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec: : tive equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8.

Keep people away from and upwind of spill/leak.

Beware of vapors accumulating to form explosive concentra-

tions. Vapors can accumulate in low areas.

Remove all sources of ignition. Pay attention to flashback.

Environmental precautions Prevent further leakage or spillage if safe to do so.

Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up Contain spillage, and then collect 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. Clean with detergents. Avoid solvents.

Retain and dispose of contaminated wash water.

#### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling Avoid contact with skin and eyes.

When using do not eat, drink or smoke.

Use only in an area containing flame proof equipment. Take precautionary measures against static discharges.

For personal protection see section 8.

Keep containers tightly closed in a dry, cool and well-Conditions for safe storage

ventilated place.

Keep out of the reach of children. Keep away from combustible material. Keep in an area equipped with sprinklers.

Keep away from food, drink and animal feedingstuffs.

No smoking.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propiconazole (ISO)	60207-90-1	TWA	5 mg/m3	Syngenta
octan-1-ol	111-87-5	TWA	50 ppm	US WEEL
azoxystrobin (ISO)	131860-33-8	TWA	0.7 mg/m3	Syngenta

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pydiflumetofen	1228284-64- 7	TWA	5 mg/m3	Syngenta
propane-1,2,3-triol	56-81-5	TWA (mist, respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (mist, total dust)	15 mg/m3	OSHA Z-1
		TWA (Mist - total dust)	10 mg/m3	OSHA P0
		TWA (Mist - respirable fraction)	5 mg/m3	OSHA P0

**Engineering measures** 

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

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.

Maintain air concentrations below occupational exposure standards.

Where necessary, seek additional occupational hygiene advice.

### Personal protective equipment

Respiratory protection

Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Remarks

Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. 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 break through time

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depends amongst other things from the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical break-

through.

Eye protection : Tightly fitting safety goggles

Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded.

Skin and body protection : Choose body protection in relation to its type, to the concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

Remove and wash contaminated clothing before re-use.

Wear as appropriate: Impervious clothing

Protective measures : The use of technical measures should always have priority

over the use of personal protective equipment.

When selecting personal protective equipment, seek appro-

priate professional advice.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Color : beige

Odor : No data available

Odor Threshold : No data available

pH : 5-9

Concentration: 1 %w/v

Melting point/freezing point : No data available

Initial boiling point and boiling :

range

No data available

Flash point : Method: Pensky-Martens closed cup

does not flash

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower :

flammability limit

No data available

Vapor pressure : No data available

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Relative vapor density No data available

Density 1.05 - 1.09 g/cm3 (68 °F / 20 °C)

Solubility(ies)

Water solubility No data available

Solubility in other solvents No data available

Partition coefficient: n-

octanol/water

No data available

No data available Autoignition temperature

Decomposition temperature No data available

Viscosity

Viscosity, kinematic No data available

Explosive properties No data available

Oxidizing properties No data available

Particle characteristics

Particle size No data available

## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity None reasonably foreseeable. Chemical stability Stable under normal conditions.

Possibility of hazardous reac-

Conditions to avoid

tions

No dangerous reaction known under conditions of normal use.

Incompatible materials None known.

Hazardous decomposition

products

No hazardous decomposition products are known.

No decomposition if used as directed.

### **SECTION 11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

Ingestion Inhalation Skin contact Eye contact

### **Acute toxicity**

Not classified due to lack of data.

**Product:** 

Acute oral toxicity LD50 (Rat, female): > 2,000 mg/kg

Assessment: The component/mixture is minimally toxic after

single ingestion.

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Acute inhalation toxicity : LC50 (Rat, male and female): > 5.03 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance/mixture is not toxic on inhalation

as defined by dangerous goods regulations.

**Components:** 

propiconazole (ISO):

Acute oral toxicity : LD50 (Rat, female): 550 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.8 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

octan-1-ol:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.6 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

azoxystrobin (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, female): 0.698 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

pydiflumetofen:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.11 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

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Assessment: The component/mixture is minimally toxic after

short term inhalation.

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

propane-1,2,3-triol:

Acute oral toxicity : LD50 (Rat, female): > 4,000 mg/kg

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat, male): > 2.75 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rat, female): > 5,000 mg/kg

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

**Product:** 

Species : Rabbit

Result : No skin irritation

Remarks : Based on data from similar materials

**Components:** 

propiconazole (ISO):

Species : Rabbit

Result : No skin irritation

octan-1-ol:

Species : Rabbit

Result : No skin irritation

azoxystrobin (ISO):

Species : Rabbit

Result : No skin irritation

pydiflumetofen:

Species : Rabbit

Result : No skin irritation

propane-1,2,3-triol:

Species : Rabbit

Result : No skin irritation

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### Serious eye damage/eye irritation

Causes serious eye irritation.

#### **Product:**

Species : Rabbit
Result : Eye irritation

### **Components:**

propiconazole (ISO):

Species : Rabbit

Result : No eye irritation

octan-1-ol:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

azoxystrobin (ISO):

Species : Rabbit

Result : No eye irritation

pydiflumetofen:

Species : Rabbit

Result : No eye irritation

propane-1,2,3-triol:

Species : Rabbit

Result : No eye irritation

## Respiratory or skin sensitization

### Skin sensitization

Based on available data, the classification criteria are not met.

## Respiratory sensitization

Not classified due to lack of data.

**Product:** 

Test Type : Local lymph node assay (LLNA)

Species : Mouse

Result : Not a skin sensitizer.

Components:

propiconazole (ISO):

Species : Guinea pig

Result : The product is a skin sensitizer, sub-category 1B.

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octan-1-ol:

Species : Guinea pig

Result : Does not cause skin sensitization.

azoxystrobin (ISO):

Species : Guinea pig

Result : Does not cause skin sensitization.

pydiflumetofen:

Test Type : mouse lymphoma cells

Species : Mouse

Result : Does not cause skin sensitization.

propane-1,2,3-triol:

Species : Guinea pig

Result : Not a skin sensitizer.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

**Product:** 

Germ cell mutagenicity -

Assessment

: In vitro tests did not show mutagenic effects

**Components:** 

propiconazole (ISO):

Germ cell mutagenicity - : Anin

Animal testing did not show any mutagenic effects.

Assessment

octan-1-ol:

Germ cell mutagenicity -

Animal testing did not show any mutagenic effects.

Assessment

azoxystrobin (ISO):

Germ cell mutagenicity -

Animal testing did not show any mutagenic effects.

Assessment

pydiflumetofen:

Germ cell mutagenicity -

Assessment

Animal testing did not show any mutagenic effects.

propane-1,2,3-triol:

Germ cell mutagenicity -

: In vitro tests did not show mutagenic effects

Assessment

Carcinogenicity

Not classified due to lack of data.

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Components:

propiconazole (ISO):

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

octan-1-ol:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

azoxystrobin (ISO):

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

pydiflumetofen:

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

propane-1,2,3-triol:

Carcinogenicity - Assess- : No evidence of carcinogenicity in animal studies.

ment

IARC No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Suspected of damaging the unborn child.

Components:

propiconazole (ISO):

Reproductive toxicity - As-

sessment

Some evidence of adverse effects on development, based on

animal experiments.

octan-1-ol:

Reproductive toxicity - As-

sessment

No toxicity to reproduction, No effects on or via lactation

azoxystrobin (ISO):

Reproductive toxicity - As-

sessment

No toxicity to reproduction, No effects on or via lactation

pydiflumetofen:

Reproductive toxicity - As-

sessment

No toxicity to reproduction, No effects on or via lactation

propane-1,2,3-triol:

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Reproductive toxicity - As-

sessment

: No toxicity to reproduction, No effects on or via lactation

STOT-single exposure

Not classified due to lack of data.

Components:

propiconazole (ISO):

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

octan-1-ol:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

pydiflumetofen:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

STOT-repeated exposure

May cause damage to organs (Bile duct) through prolonged or repeated exposure.

**Components:** 

propiconazole (ISO):

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

octan-1-ol:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

azoxystrobin (ISO):

Target Organs : Bile duct

Assessment : The substance or mixture is classified as specific target organ

toxicant, repeated exposure, category 2.

pydiflumetofen:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

propane-1,2,3-triol:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

**Aspiration toxicity** 

Not classified due to lack of data.

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#### **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity** 

**Components:** 

propiconazole (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.3 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Americamysis): 0.51 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): 8.9

mg/l

Exposure time: 96 h

EC10 (Raphidocelis subcapitata (freshwater green alga)):

 $0.96 \, \text{mg/l}$ 

End point: Growth rate Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Cyprinodon variegatus (sheepshead minnow)): 0.068

mg/l

Exposure time: 95 d

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Americamysis): 0.11 mg/l

Exposure time: 28 d

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l

Exposure time: 3 h

octan-1-ol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 13.3 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 20 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): 14

mg/l

Exposure time: 96 h

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 1 mg/l

Exposure time: 21 d

azoxystrobin (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.47 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0.28 mg/l

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aquatic invertebrates Exposure time: 48 h

EC50 (Americamysis): 0.055 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)):

1.109 mg/l

Exposure time: 72 h

EC10 (Raphidocelis subcapitata (freshwater green alga)):

0.0303 mg/l

End point: Growth rate Exposure time: 72 h

ErC50 (Skeletonema costatum (marine diatom)): 0.250 mg/l

Exposure time: 72 h

NOEC (Skeletonema costatum (marine diatom)): 0.010 mg/l

End point: Growth rate Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.16 mg/l

Exposure time: 28 d

EC10 (Pimephales promelas (fathead minnow)): 0.2197 mg/l

Exposure time: 33 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.044 mg/l

Exposure time: 21 d

NOEC (Americamysis): 0.00954 mg/l

Exposure time: 28 d

Toxicity to microorganisms : IC50 (Pseudomonas putida): > 3.2 mg/l

Exposure time: 6 h

pydiflumetofen:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.18 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.42 mg/l

Exposure time: 48 h

LC50 (Hyalella azteca (Amphipod)): 0.12 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): >

5.9 mg/l

Exposure time: 72 h

EC10 (Raphidocelis subcapitata (freshwater green alga)): 2.3

na/l

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End point: Growth rate Exposure time: 72 h

ErC50 (Navicula pelliculosa (Freshwater diatom)): 1.6 mg/l

Exposure time: 72 h

EC10 (Navicula pelliculosa (Freshwater diatom)): 0.97 mg/l

End point: Growth rate Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

EC10 (Pimephales promelas (fathead minnow)): 0.15 mg/l

Exposure time: 32 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.042 mg/l

Exposure time: 21 d

### Persistence and degradability

### **Components:**

propiconazole (ISO):

Biodegradability : Result: Not readily biodegradable.

octan-1-ol:

Biodegradability : Result: Readily biodegradable.

azoxystrobin (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 224 d

Remarks: Persistent in water.

pydiflumetofen:

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 236 d

Remarks: Persistent in water.

## Bioaccumulative potential

#### Components:

propiconazole (ISO):

Bioaccumulation : Remarks: Medium bioaccumulation potential.

Partition coefficient: n-

octanol/water

: log Pow: 3.72 (77 °F / 25 °C)

azoxystrobin (ISO):

Bioaccumulation : Remarks: Does not bioaccumulate.

according to the OSHA Hazard Communication Standard



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pydiflumetofen:

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: 3.8 (77 °F / 25 °C)

Mobility in soil

**Components:** 

propiconazole (ISO):

Distribution among environ-

mental compartments
Stability in soil

: Dissipation time: 66 - 170 d

Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

azoxystrobin (ISO):

Distribution among environ-

mental compartments

Remarks: Low mobility in soil.

Remarks: Low mobility in soil.

Stability in soil : Dissipation time: 81.3 d

Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

pydiflumetofen:

Distribution among environ-

mental compartments

Remarks: Low mobility in soil.

Stability in soil : Dissipation time: 674 d

Percentage dissipation: 50 % (DT50)

Remarks: Persistent in soil.

Other adverse effects

**Components:** 

propiconazole (ISO):

Results of PBT and vPvB

assessment

Substance is not persistent, bioaccumulative, and toxic (PBT).

Substance is not very persistent and very bioaccumulative

(vPvB).

octan-1-ol:

Results of PBT and vPvB

assessment

Substance is not persistent, bioaccumulative, and toxic (PBT).

Substance is not very persistent and very bioaccumulative

(vPvB).

azoxystrobin (ISO):

Results of PBT and vPvB

assessment

Substance is not persistent, bioaccumulative, and toxic (PBT).

Substance is not very persistent and very bioaccumulative

(vPvB).

pydiflumetofen:

according to the OSHA Hazard Communication Standard



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Results of PBT and vPvB

assessment

: Substance is not persistent, bioaccumulative, and toxic (PBT).

Substance is not very persistent and very bioaccumulative

(vPvB).

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Do not dispose of waste into sewer.

Where possible recycling is preferred to disposal or incinera-

tion.

If recycling is not practicable, dispose of in compliance with

local regulations.

This product will not be classified as a RCRA characteristic

hazardous waste when discarded.

Contaminated packaging : Empty remaining contents.

Triple rinse containers.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal. Do not re-use empty containers.

#### **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

**UNRTDG** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(AZOXYSTROBIN, PROPICONAZOLE)

Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes

Remarks : This product can be subject to exemptions when packaged in

single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a

net mass of 5 kg or less for solids.

IATA-DGR

UN/ID No. : UN 3082

Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.

(AZOXYSTROBIN, PROPICONAZOLE)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo

aircraft)

Packing instruction (passen-

: 964

964

ger aircraft)

Environmentally hazardous : yes

according to the OSHA Hazard Communication Standard



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Remarks : This product can be subject to exemptions when packaged in

single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a

net mass of 5 kg or less for solids.

**IMDG-Code** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(AZOXYSTROBIN, PROPICONAZOLE)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-

EmS Code : F-A, S-F Marine pollutant : yes

Remarks : This product can be subject to exemptions when packaged in

single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a

net mass of 5 kg or less for solids.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

**Domestic regulation** 

49 CFR

Not regulated as a dangerous good

Special precautions for user

Remarks : 49CFR: no dangerous good in non-bulk packaging

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

Reproductive toxicity

Specific target organ toxicity (single or repeated exposure)

Serious eye damage or eye irritation

SARA 313 : The following components are subject to reporting levels es-

tablished by SARA Title III, Section 313:

propiconazole 60207-90-1 >= 10 - < 20 %

(ISO)

according to the OSHA Hazard Communication Standard



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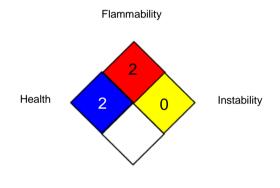
#### California Prop. 65

WARNING: This product can expose you to chemicals including quartz (SiO2), which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

#### **SECTION 16. OTHER INFORMATION**

#### **Further information**

#### **NFPA 704:**



Special hazard

#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

#### Full text of other abbreviations

OSHA P0 : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated

values)

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

US WEEL : USA. Workplace Environmental Exposure Levels (WEEL)

OSHA P0 / TWA : 8-hour time weighted average
OSHA Z-1 / TWA : 8-hour time weighted average
Syngenta / TWA : Time weighted average

US WEEL / TWA : 8-hr TWA

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification Sys-

according to the OSHA Hazard Communication Standard



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tem; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals: OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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.

US / EN