

Safety Data Sheet

release date 29-NOV-2001
replaces all previous editions

Trade Name Syngenta

ARTEA 330 EC

1. Identification of the substance / preparation and of the company / undertaking

Identification of the substance or preparation

Trade Name Syngenta ARTEA 330 EC
Design Code A10506A
AGI Code 102035

Company / undertaking identification

Company Syngenta Crop Protection AG
Postfach
CH-4002 Basel
Switzerland
Phone +41 61 323 11 11
Fax +41 61 323 12 12

Product Information Phone (office hours) +41 61 323 40 40

Emergency **Phone (24h) +41 61 323 33 33**

Emergency Information concerning
- transport see emergency phone number in the shipping documents
- storage see emergency phone number of local Syngenta organization

2. Composition / information on ingredients

Chemical characteristic

Formulation type	Emulsifiable concentrate		
Use	Fungicide		
Active ingredient(s)	8 % w/v	cyproconazole	SAN619
	25 % w/v	propiconazole (ISO draft)	CGA64250

Hazardous Component(s)

CAS	Name	% w/w	Hazard Symbol	Special Risks
94361-06-5	cyproconazole	7.8	N,Xn	22-50/53-63
60207-90-1	propiconazole (ISO draft)	24.4	N,Xn	22-43-50/53
26264-06-2	benzenesulfonic acid, dodecyl-, calcium salt	4 - 10	Xi	36/38
9004-98-2	poly(oxy-1,2-ethanediyl), alpha -9-octadecenyl-omega-hydroxy-,(Z)-	4 - 10	Xn	22-41
872-50-4	2-pyrrolidinone, 1-methyl-	5 - 20	Xi	36/38

Information to exposure limit values see section 8.

3. Hazards Identification

Health Hazards: Irritating to skin and eyes. Possible risk of harm to the unborn child.

Environmental hazard in case of accident (Spillage/Leakage): Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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4. First-Aid Measures

First-Aid Measures

General: In case of indisposition place the patient in a well-ventilated area and protect him from hypothermia. IN CASE OF SUSPECTED POISONING: Immediately call a physician.

Eye Contact: Rinse eyes with clean water for several minutes and immediately call a physician.

Ingestion: Repeatedly administer medicinal charcoal in a large quantity of water. NOTE: Never give anything by mouth to an unconscious person. Do not induce vomiting.

Skin Contact: Remove contaminated clothing and thoroughly wash the affected parts of the body with soap and water, including hair and under fingernails.

Inhalation: Immediately remove to fresh air.

Medical Instructions

Antidote: No specific antidote is known! Apply symptomatic therapy.

Experiences Specific to Man: No case of human poisoning is on record.

5. Fire-Fighting Measures

Combustibility: This product is combustible at elevated temperatures.

Extinguishing media

Suitable Extinguishing Media: Dry chemical extinguisher, foam, carbon dioxide or waterspray (do not use direct jet of water).

Fire fighting

Special Hazards during Fire Fighting: Combustion products are toxic and/or irritant. Measures have to be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.

Hazardous Combustion Products: carbon dioxide; carbon monoxide; nitrogen oxides; sulfur dioxide; hydrogen chloride;

Protective Equipment for Fire Fighting: Use self contained breathing apparatus. Wear protective equipment.

Swiss Fire Prevention Class: F3 L CO

6. Accidental Release Measures

Environmental Protection Measures following Accidents: Pay attention to protective clothing and safety measures. Cover up product with absorptive material such as sand, soil, diatomaceous earth, etc. and dispose of in an incinerator approved for chemicals. Collect material in specially marked, tightly closing containers. Wash away the remainder with plenty of water and a wetting agent. Spilled product cannot be used further and must be disposed of. If safe disposal is not possible, contact the manufacturer, the dealer or the local representative. Do not contaminate waters and sewers.

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7. Handling and Storage

Handling information

General: Women of childbearing age should avoid handling this product. Avoid contact with skin, eyes and clothing. Avoid inhalation of fog and vapours. Do not eat, drink or smoke while working. In addition to the measures usually taken in chemical works like splashproof filling and measuring equipment (including vapour stripping), further personal protection measures may have to be implemented to avoid possible contact with the product.

Storage information

Special Instructions for Storage: Store the product in closed original containers. Protect from light and humidity.

Storage Compatibility with other Products: Store separately from feed, food and stimulants. Store the product in closed original containers.

Storage Temperature

Max. Storage Temperature: 35 °C

Min. Storage Temperature: -10 °C

8. Exposure controls / Personal protection

Germany (1-methyl-2-pyrrolidone)

MAK (DFG): 20 ppm; 80 mg/m³

Notes: C; H

Switzerland (1-methyl-2-pyrrolidone)

MAK (SUVA): 20 ppm; 80 mg/m³

STEL (SUVA): 100 ppm; 400 mg/m³

Notes: C; H

Internal exposure limit: (cyproconazole)

NIEL (Novartis internal exposure level): 0.5 mg/m³

Personal protective equipment

In General: Change working clothes daily.

Breathing Protection: In case of heavy exposure, wear: Gas mask with universal filter.

Eye Protection: Goggles or face-shield

Hand Protection: Chemical-resistant gloves

Body Protection: Heavy duty cotton or synthetic fabric impermeable working clothes (e.g. overalls). Rubber apron. Heavy-duty shoes or boots.

Precautionary measures after work: Wash thoroughly (shower, bathe, wash hair). Change clothing. Thoroughly clean protective gear. Thoroughly clean contaminated equipment with soap or soda solution.

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9. Physical and Chemical Properties

Form:	liquid	
Color:	yellow orange to dark brown	
Physical State:	liquid	
Flash-Point:	63 °C (1013 hPa; DIN EN 22719)	EEC A 9
Oxidizing Properties:	not oxidizing	
Explosive Properties		EEC A 14
Assessment:	not explosive	
Shock Sensitivity:	not shock sensitive	
Density:	1.01 - 1.05 g/cm ³ (20 °C)	OECD 109
pH Value:	4 - 8 (1 %; in deionised water)	CIPAC MT 75.2
Surface Tension:	31.6 mN/m (20.0 g/l; Emulsion in distilled water; 20 °C)	EEC A 5
Surface Tension:	33.7 mN/m (1.0 g/l; Emulsion in distilled water; 20 °C)	EEC A 5
Miscibility with water:	miscible (1 %; ca 23 °C)	
Dynamic Viscosity:	15.9 mPa.s (10 - 200 rps; 20 °C)	OECD 114
Dynamic Viscosity:	8.0 mPa.s (10 - 200 rps; 40 °C)	OECD 114

10. Stability and Reactivity

Chemical Stability

Assessment: Stable under standard conditions.

Sensitivity

Thermal Sensitivity: thermally not sensitive

11. Toxicological Information

Acute Oral Toxicity		OECD 401
LD50:	> 2000 mg/kg (rat)	
Acute Dermal Toxicity		OECD 402
LD50:	> 2000 mg/kg (rat)	
Acute Inhalation Toxicity		OECD 403
LC50:	> 5.17 mg/l (rat; 4 h)	
Acute Skin Irritation:	moderately irritant (rabbit)	OECD 404
Acute Eye Irritation:	moderately irritant (rabbit)	OECD 405
Skin Sensitization:	not sensitizing (guinea pig; Maximization test)	OECD 406
Additional Toxicological Information:	There are indications of developmental toxic effects from reproduction studies with cyproconazole.	

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12. Ecological Information

Acute Toxicity to Fish

LC50: ca 22 mg/l (Oncorhynchus mykiss (Rainbow trout); 96 h; Derived from active ingredient(s))

Growth Inhibition, Algae

EC50: ca 0.15 mg/l (Selenastrum capricornutum (green algae); 72 h; Derived from active ingredient(s))

Toxicity to Aquatic Invertebrates

EC50: ca 42 mg/l (Daphnia magna (water flea); 48 h; Derived from active ingredient(s))

13. Disposal Considerations

Disposal

Product Disposal: Pay attention to protective clothing and measures. Cover up product with absorptive material such as sand, soil, diatomaceous earth, etc. Collect material in specially marked, tightly closing containers. Clean dirty areas with water and detergent. Put washing water in containers too, to avoid any contamination of surface and ground water, water supplies and drains. Hose down the area for a prolonged period. Heavily contaminated soil layers have to be dug out down to clean soil. Spilled product cannot be used further and must be disposed of. If safe disposal is not possible, contact the manufacturer, the dealer or the local representative and dispose of in an incinerator approved for chemicals.

Container Disposal: Dispose of empty containers in an incinerator approved for chemicals. Damaged containers: Place original containers in specially marked larger ones. Check possibilities of recycling large empty containers, drums and barrels.

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14. Transport Information

Special Information: Use unbreakable containers, make sure they cannot fall, and label in accordance with regulations.

Rail / Road (RID / ADR)	Class	UN no.	Pack. Group	Kemmler Index	CEPIC
	9	3082	III	90	90G01

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Additional Information	(PROPICONAZOLE AND CYPROCONAZOLE)

Sea (IMDG-Code)	Class	UN no.	Pack. Group
	9	3082	III

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Additional Information	PROPICONAZOLE 25% AND CYPROCONAZOLE 8%)
Marine pollutant	yes

Air (ICAO / IATA)	Class	UN no.	Pack. Group
	9	3082	III

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Additional Information	(PROPICONAZOLE AND CYPROCONAZOLE)

Swiss POST: 3 (restricted in Switzerland, with special permission POST)

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15. Regulatory Information

EU-Classification

Labelling Requirement

Type of Classification

Hazard Symbol

N

Xn

required

Self-Classification

Dangerous for the environment

Harmful

Special Risks

36/38

50/53

Irritating to eyes and skin.

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

Safety Advice

63

2

13

20/21

36/37/39

60

61

Possible risk of harm to the unborn child.

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

When using do not eat, drink or smoke.

Wear suitable protective clothing, gloves and eye/face protection.

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment. Refer to special instructions/Safety data sheets.

Source of Hazard

N-methyl-2-pyrrolidone

cyproconazole

propiconazole

International

WHO Toxicity Classification

-

III: Product unlikely to present acute hazard in normal use

Weight limit (Switzerland)
as prescribed by accident
regulations

200000 kg

16. Other Information

The information contained herein is based on the present state of our knowledge as is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.