

Safety Data Sheet

release date 12-JAN-2001
replaces all previous editions

Trade Name Syngenta

BANNER 250 EC

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

Identification of the substance or preparation

Trade Name Syngenta BANNER 250 EC
Design Code A6097K
AGI Code 86427

Company / undertaking identification

Company Syngenta Crop Protection AG
P.O. Box
CH-4002 Basel
Switzerland
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Product Information Phone (office hours) +41 61 323 40 40

Emergency **Phone (24h) +41 61 696 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)	25	% w/v	propiconazole (ISO draft)	CGA64250
Hazardous Component(s)				
CAS	Name	% w/w	Hazard Symbol	Special Risks (R-phrases)
9004-98-2	poly(oxy-1,2-ethanediyl), alpha-9-octadecenyl-omega-hydroxy-, (Z)-	1 - 2	Xn	22-36/38
78-83-1	1-propanol, 2-methyl-	1 - 2	Xi	10-37/38-41-67
64742-94-5	solvent naphtha (petroleum), heavy arom.	55 - 65	Xn	65
60207-90-1	propiconazole (ISO draft)	25.1	N,Xn	22-43-50/53
70528-83-5	benzenesulfonic acid, dodecyl-, branched, calcium salts	1 - 3	C	20/21-34

Information to exposure limit values see section 8.

3. Hazards Identification

Health Hazards: Harmful: may cause lung damage if swallowed. Irritating to skin and eyes.

Environmental hazard in case of accident (Spillage/Leakage): Very toxic to algae. Toxic to fish and daphniae.

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4. First-Aid Measures

First-Aid Measures

General: Remove the affected person from the danger zone to a well-ventilated room or to fresh air, and protect from undercooling. **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.

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: yes

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.

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: Soak up with absorptive material such as sand, soil, diatomaceous earth, etc. Prevent material from spreading, e.g. by damming in with absorptive material. Collect material in specially marked, tightly closing containers. 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. Keep away from sources of ignition.

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7. Handling and Storage

Handling information

General: Shake well before use. 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.

Storage Compatibility with other Products: Store separately from feed, food and stimulants.

Storage Temperature

Max. Storage Temperature: 35 °C

Min. Storage Temperature: -10 °C

8. Exposure controls / Personal protection

Germany (isobutanol)

MAK (DFG): 100 ppm; 300 mg/m³

Notes: C

Switzerland (isobutanol)

MAK (SUVA): 150 mg/m³; 50 ppm

STEL (SUVA): 100 ppm; 300 mg/m³

Notes: C

USA (isobutanol)

TWA (ACGIH): 152 mg/m³; 50 ppm

IDLH (NIOSH): 1600 ppm

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 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:	light yellow to yellow	
Physical State:	liquid	
Solidification Point:	< -10 °C	
Boiling Point/Range	> 170 °C	
Flash-Point:	57.0 °C (1013 hPa; DIN EN 22719)	EEC A 9
Density:	0.96 - 1.00 g/cm ³ (20 °C)	OECD 109
pH Value:	4 - 8 (1 %; in deionised water)	CIPAC MT 75.2
Surface Tension:	36.9 mN/m (1.0 g/l; in distilled water; 20 °C)	EEC A 5
Surface Tension:	34.2 mN/m (4.0 g/l; in distilled water; 20 °C)	EEC A 5
Surface Tension:	31.5 mN/m (as is; 25 °C)	EEC A 5
Miscibility with water:	miscible	
Kinematic Viscosity:	2.9 mm ² /s (40 °C)	OECD 114

10. Stability and Reactivity

Chemical Stability

Assessment: Stable under standard conditions.

Corrosiveness

Corrosiveness / Appropriate Material: not corrosive

11. Toxicological Information

Acute Oral Toxicity (rat)		OECD 401
LD50:	> 2000 < 3000 mg/kg (rat; female)	
LD50:	> 3000 mg/kg (rat; male)	
Acute Dermal Toxicity		OECD 402
LD50:	> 4000 mg/kg (rat)	
Acute Inhalation Toxicity		
LC50:	> 1000 mg/m ³ (rat; 4 h; LC50 not attained)	
Acute Skin Irritation:	irritant (rabbit; assessment according to 93/21/EEC)	OECD 404
Acute Eye Irritation:	irritant (rabbit; assessment according to 93/21/EEC)	OECD 405
Skin Sensitization:	not sensitizing (guinea pig; assessment according to 93/21/EEC; Buehler test)	OECD 406

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12. Ecological Information

Acute Toxicity to Fish

LC50: 5.7 mg/l (Salmo trutta (trout); 96 h)
LC50: 11.0 mg/l (Cyprinus carpio (Common carp); 96 h)
LC50: 6.7 mg/l (bluegill; 96 h)

Toxicity to Aquatic Invertebrates

LC50: 6.9 mg/l (Daphnia magna (water flea); 48 h)

Toxicity to Bees

LD50: > 100 µg/bee (Apis mellifera (honey bee))

Toxicity to Soil Dwelling Organisms

LC50: 169 mg/kg (earthworm; 14 day(s))

Toxicity to Birds

LD50: 5858 mg/kg (peking duck)
LD50: > 2553 mg/kg (japanese quail)

Chronic Toxicity to Birds

LC50: > 1000 ppm (peking duck; 8 day(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	Cipher	UN no.	Kemmler Index	CEFIC
	3	31C	1993	30	30G35
Proper Shipping Name	FLAMMABLE LIQUID, N.O.S.				
Additional Information	(SOLVENT NAPHTHA)				
Sea (IMDG-Code)	Class	UN no.	Pack. Group	EMS	MFAG
	3.3	1993	III	3-07	310
Proper Shipping Name	FLAMMABLE LIQUID, N.O.S.				
Additional Information	(SOLVENT NAPHTHA AND PROPICONAZOLE 25%, MARINE POLLUTANT)				
Marine pollutant	yes				
Air (ICAO / IATA)	Class	UN no.	Pack. Group		
	3	1993	III		
Proper Shipping Name	FLAMMABLE LIQUID, N.O.S.				
Additional Information	(SOLVENT NAPHTHA)				

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

15. Regulatory Information

EU-Classification

Hazard Symbol	Xn	Harmful
Special Risks (R-phrases)	36/38 65	Irritating to eyes and skin. Harmful: may cause lung damage if swallowed.
Safety Advice (S-phrases)	2 13 20/21 46 62	Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. If swallowed, seek medical advice immediately and show this container or label. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
Source of Hazard		solvent naphtha (petroleum), heavy aromatic
International WHO Toxicity Classification	III	Slightly hazardous
Weight limit (Switzerland) as prescribed by accident regulations		2000 kg

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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.
