



# SAFETY DATA SHEET

## Centrino 360 FS

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MCW 8577

### Product identifier

## Centrino 360 FS

Synonyms

Fludioxonil Tebuconazole Imidacloprid FS

Pure substance/mixture

Mixture

### Relevant identified uses of the substance or mixture and uses advised against

Recommended Use

Fungicide

Uses advised against

No information available

### Details of the supplier of the safety data sheet

Supplier Address

ADAMA SOUTH AFRICA (PTY) LTD  
21 Viben Street  
Brankenfell  
7560

For further information, please contact

Email address

SDS@ADAMA.COM

### Emergency Telephone

Emergency Telephone

+ 27 82 331 6463  
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## Section 2: HAZARD IDENTIFICATION

### Classification of the substance or mixture

Acute toxicity - Oral

Category 4 - (H302)

Acute aquatic toxicity

Category 3 - (H402)

Chronic aquatic toxicity

Category 1 - (H410)

### Label Elements

Hazard pictograms

**Signal word**

Warning

**Hazard Statements**

H302 - Harmful if swallowed  
 H402 - Harmful to aquatic life  
 H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements**

P102 - Keep out of reach of children  
 P270 - Do not eat, drink or smoke when using this product  
 P501 - Dispose of contents/ container to an approved waste disposal plant

**Other Hazards**

No information available

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Mixture**

Chemical Name	Weight-%	CAS No
Fludioxonil	2 - 3	131341-86-1
Tebuconazole	0.5 - 1	107534-96-3
Imidacloprid	25 - 28	138261-41-3
Poly(oxy-1,2-ethanediyl), .alpha.-[tris(1-phenylethyl)phenyl]-.omega.-hydroxy-	9 - 11	99734-09-5
1,2-Benzisothiazolin-3-one	<0.1	2634-33-5

### Section 4: FIRST AID MEASURES

**First aid measures****General advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.

**Inhalation**

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

**Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Ingestion**

Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

**Self-protection of the first aider**

Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed****Symptoms**

None known

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**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**Section 5: FIRE-FIGHTING MEASURES****Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available.

**Special hazards arising from the substance or mixture**

No specific hazard known.

**Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus  
In the event of fire and/or explosion do not breathe fumes.

**Section 6: ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal precautions**

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**For emergency responders**

Use personal protection recommended in Section 8.

**Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

**Methods and material for containment and cleaning up****Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

**Reference to other sections****Other Information**

See also section 8,13

**Section 7: HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling**

Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place.

**Specific end use(s)****Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****National occupational exposure limits**

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration (PNEC)** No information available.

**Exposure controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

**Eye/face protection** Tight sealing safety goggles.  
**Body Protection** Suitable protective clothing.

**General Hygiene Considerations** When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES****Physical and Chemical Properties**

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Appearance</b>			
<b>Physical state</b>	: liquid		
<b>Color</b>	: red		
<b>Odor</b>	: characteristic		
<b>Odor threshold</b>	: No data available		
<b>pH</b>	: 6 - 8	CIPAC MT 75.3	solution (1 %)
<b>Melting point/freezing point °C</b>	: No data available		
<b>Boiling point/boiling range °C</b>	: No data available		
<b>Flash point °C</b>	: >130	92/69/EEC A.9	
<b>Evaporation rate</b>	: Not Applicable		
<b>Flammability (solid, gas)</b>	: Not Applicable		
<b>Upper/lower flammability or explosive limits</b>	: No data available		
<b>Vapor pressure kPa</b>	: No data available		
<b>Vapor density</b>	: No data available		
<b>Relative density</b>	: 1.169 - 1.172	OECD 109	20 °C
<b>Solubility(ies) mg/l</b>	: No data available		
<b>Partition Coefficient (n-octanol/water) Log Pow</b>	:		See Section 12 for more information
<b>Autoignition temperature °C</b>	: 410	EEC A.15	
<b>Decomposition temperature °C</b>	: No data available		

**Kinematic viscosity** mm<sup>2</sup>/s 40 °C : Not Applicable  
**Explosive properties** : Not an explosive EEC A.14  
**Oxidizing properties** : Not oxidizing EEC A.21

**Other Information**

**Bulk density** g/ml :  
**Surface tension** mN/m : Not Applicable

## Section 10: STABILITY AND REACTIVITY

**Reactivity**

Not available.

**Chemical stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible Materials**

No information available

**Hazardous Decomposition Products**

None under normal use conditions.

## Section 11: TOXICOLOGY INFORMATION

**Information on toxicological effects****Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
<b>Oral LD50</b> mg/kg	: 1000	Rat	OECD 423	
<b>Dermal LD50</b> mg/kg	: >2000	Rat	OECD 402	
<b>Inhalation LC50</b> mg/l/4h	: >5.09	Rat	OECD 403	
<b>Skin corrosion/irritation</b>	: Non-irritating to the skin	Rabbit	OECD 404	
<b>Serious eye damage/eye irritation</b>	: Not irritating to eyes	Rabbit	OECD 405	
<b>Respiratory/skin sensitization</b>	: Not a skin sensitizer	Mouse	OECD 429	

**Chronic toxicity****Germ cell mutagenicity****Chemical Name**

Fludioxonil : Not classified  
 Tebuconazole : Not classified  
 Imidacloprid : Not classified

**Carcinogenicity****Chemical Name**

Fludioxonil : Not Carcinogenic  
 Tebuconazole : Not classified  
 Imidacloprid : Not Carcinogenic

**Reproductive toxicity .****Chemical Name**

Fludioxonil : Not toxic for the reproductive system  
 Tebuconazole : H361d - Suspected of damaging the unborn child  
 Imidacloprid : Not toxic for the reproductive system

**STOT - single exposure****Chemical Name**

Fludioxonil : Not available  
 Tebuconazole : No information available  
 Imidacloprid : No data available

**STOT - repeated exposure****Chemical Name**

Fludioxonil : Not available  
 Tebuconazole : No information available  
 Imidacloprid : No data available

**Aspiration hazard****Chemical Name**

Fludioxonil : Not available  
 Tebuconazole : No information available  
 Imidacloprid : No data available

**Section 12: ECOLOGICAL INFORMATION****Toxicity****Aquatic toxicity**

<b>Acute toxicity</b>	<b>Values</b>	<b>Species</b>	<b>Method</b>	<b>Remarks</b>
<b>Fish 96-hour LC50 mg/l</b>	: 12.2	Oncorhynchus mykiss	OECD 203	semi-static
<b>Crustacea 48-hour EC50 mg/l</b>	: 11.6	Daphnia magna	OECD 202	semi-static
<b>Algae 72-hour EC50 mg/l</b>	: 11.1	P. subcapitata	OECD 201	
<b>Other plants EC50 mg/l</b>	:			No data available

**Terrestrial Toxicity****Birds Oral LD50 mg/kg****Chemical Name**

Fludioxonil	: >2000	Bobwhite quail	EPA-FIFRA 71-1
Tebuconazole	: 1988	Bobwhite quail	
Imidacloprid	: 31	Coturnix japonica	OECD 205

**Bees Oral LD50 µg/bee****Chemical Name**

Fludioxonil	: >100		EPPO 170
Tebuconazole	: 83.05		Oral
Imidacloprid	: 0.0037		OECD 213; OECD 214

**Persistence and degradability****Abiotic Degradation****Water DT50 days****Chemical Name**

	<b>Values</b>	<b>Method</b>	<b>Remarks</b>
Fludioxonil	: No data available	EPA-FIFRA 161-1	Insoluble in water
Tebuconazole	: 365		
Imidacloprid	: 0.2-10		

**Soil DT50 days**

**Chemical Name**

Fludioxonil	: 119 - 365	EPA-FIFRA 162-1	aerobic 20 °C
Tebuconazole	: 34.8		
Imidacloprid	: 106-193		

**Biodegradation****Chemical Name**

Fludioxonil	: Not readily biodegradable	
Tebuconazole	: Not readily biodegradable	OECD 301B
Imidacloprid	: Not readily biodegradable	

**Bioaccumulative potential****Partition Coefficient  
(n-octanol/water) Log Pow  
Chemical Name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Fludioxonil	: 4.12	OECD 107	
Tebuconazole	: 3.7		
Imidacloprid	: 0.57	OECD 107	

**Bioconcentration factor (BCF)****Chemical Name**

Fludioxonil	: 366	OECD 305E
Tebuconazole	: 78	
Imidacloprid	: 0.88	

**Mobility in soil****Adsorption/Desorption  
Chemical Name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Fludioxonil	: 12000 - 385000	OECD 106	Koc
Tebuconazole	: 769		Koc
Imidacloprid	: 109-411	OECD 106	Koc

**Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB

**Other adverse effects**

No information available.

## Section 13: DISPOSAL CONSIDERATIONS

**Waste treatment methods**

<b>Waste from residues/unused products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.
<b>Other Information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

## Section 14: TRANSPORTATION INFORMATION

**IMDG/IMO****UN/ID No****Proper shipping name**

3082  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Imidacloprid  
Fludioxonil Tebuconazole )

Hazard Class 9  
Packing Group III  
Marine pollutant Yes  
Special precautions for user

**RID/ADR**

UN/ID No 3082  
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Imidacloprid Fludioxonil Tebuconazole )

Hazard Class 9  
Packing Group III  
Environmental hazard Yes  
Special precautions for user

**ICAO/IATA**

UN/ID No 3082  
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Imidacloprid Fludioxonil Tebuconazole )

Hazard Class 9  
Packing Group III  
Environmental hazard Yes  
Special precautions for user  
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not Applicable

**Section 15: REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture

**Section 16: OTHER INFORMATION**

Revision Note \*\*\* - Change from previous version.

**Disclaimer**

The information provided in this Material 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.

End of Safety Data Sheet