Almandine Corporation SA

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SAFETY DATA SHEET

SAVANNAH 625 SC

Issue date: 30.11.2012

1. COMPOSITION AND PRODUCT IDENTIFICATION

Product name: Savannah 625 SC

Active ingredients: Fludioxonil and cyprodinil

IUPAC names: 4-(2,2-difluoro-1,3-benzodioxonil) pyrrole-3-carbonitrile and
4-cyclopropyl-6-methyl-N-phenylpyrimidin-2-amine

Chemical Groups: Phenylpyrrole and anilino-pyrimidine

Producer:
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Formulation site:
Sub-Micron Industries Ltd
Cleckheaton
Huddersfield
West Yorkshire
UK

2. HAZARDS IDENTIFICATION

Hazard Symbol:

N
Dangerous for the environment

R-Phrases:

R51/53: **Toxic to aquatic organisms; may cause long term effects in the aquatic environment**.

Ingestion: Minimal toxicity causes no obvious toxicological symptoms.

Acute/chronic effects: Has low acute and chronic toxicity in both humans and mammals.

Safety phrases:

S2	**Keep out of the reach of children**
S60	**This material and its container must be disposed of as hazardous waste**
S61	**Avoid release to the environment. Refer to special instructions/safety data sheet**

3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	% w/v	CAS N^{o}	Symbol	R-phrases
Fludioxonil	25	131341-20-3	N	R50/53
Cyprodinil	37.5	121552-61-2	Xi, N	R43, R50/53

For R-phrases see Sections 2, 15 and 16

4. FIRST AID MEASURES

Inhalation: Remove patient from exposure, keep warm and at rest. Obtain medical attention if required.

Skin contact: Remove immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water to minimise contact with skin. Wash contaminated clothing before wearing again.

Eye contact: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart for at least 15 minutes. Obtain immediate medical attention.

Ingestion: If swallowed seek medical advice immediately and show the container, label or this Data sheet, if possible. Provided the patient is conscious, wash out mouth with water.
Do not induce vomiting.

Medical Advice: There is no specific antidote, treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray. Keep unexposed containers cool with water spray. Water jet is not recommended.

Protective equipment: A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

Under fire conditions: May produce toxic gases: $NO_{x,}$ $CO_{x,}$ CN.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure suitable personal protection during removal of spillages (see section 8). Stop spills if safe to do so.

Clean up methods: Absorb spill with a non combustible absorbent material, such as sand, earth or diatomaceous earth. Shovel into well labelled, sealed, suitable containers.
For large spills it may be necessary to dyke spill area to prevent contamination of drains and waterways.

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Environmental precautions: Do not flush into water sources, drains or sewage systems. If product enters sewage or contaminates water sources, inform the relevant authorities.

7. HANDLING AND STORAGE

Handling: Use PPE as outlined in section 8. Do not eat drink or smoke while using this product.

Storage: Keep original containers, tightly closed, out of reach of children. Keep away from food, drink and animal feeds. Avoid storing at freezing temperatures.

Storage Life: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure limits:

Hazardous ingredient: Fludioxonil: 10 mg/m^3 TWA 8h
Cyprodinil: 7mg/m^3 TWA 8h

Time weighted average (TWA) is the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

Respiratory protection: No respiratory protection normally required. A particulate filter may be needed if there is a risk of OELs being exceeded or excessive dust production.

Skin protection: No special protection required.

Hand protection: Chemical resistant gloves should be used. Suitable materials include: nitrile rubber.

Eye protection: Not usually required.

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: Off-white milky liquid

Flash Point: >100°C (Closed cup)

pH: 8 – 11 (1% dilution)

Density: 1.1 - 1.2 g/cm^3

Odour: No/ weak odour

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Flammability: Non flammable

10. STABILITY AND REACTIVITY

Hazardous decomposition Products: Combustion or thermal decomposition will evolve toxic and irritant vapours. Hazardous polymerisation does not occur. Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

(Based on formulation)

Oral toxicity: LD_{50} rat: >2000 mg/kg (GHS Category 5)

Dermal toxicity: LD_{50} rat: >2000 mg/kg (GHS Category 5)

Inhalation toxicity: >2.51 mg/L (based on similar formulation)

Skin irritation: Non-irritant

Eye irritation: Non-irritant

Skin sensitisation: Not a skin sensitiser

Chronic: Cyprodinil and fludioxonil technical materials have been extensively tested on laboratory mammals, and in vitro. No evidence of mutagenic, carcinogenic teratogenic or reproductive effects was obtained for either substance.

Long term exposure: No long term risks to man are associated with the normal handling and use of this material.

WHO toxicity classification: III, slightly hazardous

12. ECOLOGICAL INFORMATION

(based on cyprodinil technical material)

Fish toxicity:	LC_{50} 96 h Bluegill sunfish:	1.07-2.17 mg/l
	Rainbow trout:	0.98-2.41 mg/l
Aquatic invertebrates:	EC_{50}: 48h *Daphnia* spp.	0.03-0.1 mg/l
Algal toxicity:	EC_{50} 72 h *Scenedesmus subspicatus*	0.75 mg/l

Bioaccumulation: Does not bioaccumulate.

Stability in water: Photolytic DT_{50} in water 13.5 d.

Stability in soil: Cyprodinil is not persistent in soil. DT_{50} 20-60 d.

Mobility: The compound proved to be immobile in soil, RMF<0.1

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(based on fludioxonil technical material)

Birds:	LC_{50}	mallard duck:	>2000 mg/kg
Fish toxicity:	LC_{50} 96 h	Bluegill sunfish: Rainbow trout:	0.31 mg/L 0.5 mg/L
Aquatic invertebrates:	EC_{50} 48h	*Daphnia* spp.	1.11 mg/L
Algal toxicity:	EC_{50} 72 h	*Scenedesmus subspicatus*	0.93 mg/L

Practically non-toxic to birds and bees

Bioaccumulation: Fludioxonil does not bioaccumulate.

Stability in water: Fludioxonil is stable in water.

Stability in soil: Fludioxonil is persistent in soil.

Mobility: Fludioxonil has low mobility in soil.

13. DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers. Empty containers should be triple-washed and discarded. Empty containers should not be used for other purposes. Disposal should be in accordance with local, state or national legislation.

14. TRANSPORTATION INFORMATION

UN number:	ADR/RID: 3082	IMDG: 3082	IATA: 3082
UN Proper Shipping Name:	Environmentally hazardous substance, liquid, N.O.S. (contains cyprodinil and fludioxonil)		
Transport hazard class:	ADR/RID: 9	IMDG: 9	IATA: 9
Packaging group:	ADR/RID: III	IMDG: III	IATA: III
Environmental hazard:	ADR/RID: Yes	IMDG: Marine pollutant: Yes	IATA: Yes

15. REGULATORY INFORMATION

No additional regulatory information.

16. OTHER INFORMATION

Additional relevant risk phrases:
These risk phrases are for hazardous components in the product but are not at levels that require risk statements. They provide additional information on risks.

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R43	**May cause sensitisation by skin contact**
R50/53	**Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment**

No liability is accepted for any injury, loss, damage or cost arising directly or indirectly from the use of the product or from the use of information contained within the safety data sheet since the customer's treatment of the product is necessarily beyond our control. The supplied data are based on current knowledge and experience. This safety data sheet is intended to describe our product in terms of safety requirements. The customer should determine by appropriate trials that the product is suitable for his intended use.