



SAFETY DATA SHEET

SUNRISE 100 FS

SDS/GHS/Gen/V1.0

Issue date: 11.07.2022

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifiers

Product name: SUNRISE 100 FS
Chemical name: contains Fludioxonil (4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H-pyrrole-3-carbonitrile
CAS No.: 131341-86-1

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

Identified uses: Fungicide Seed Treatment

Details of the supplier of the safety data sheet

Producer: Almandine Corporation SA
Gotthardstrasse 3
6300 Zug
Switzerland
Tel: +44 20 8995 8391 (UK office)
Fax: +44 20 8995 7639
Email: almuk@almandine.com

Emergency telephone number

Tel: +44 20 8995 8391 (SDS support, 9.00-5.00 pm; Mon-Fri only, UK)

SECTION 2: HAZARDS IDENTIFICATION

Aq chronic 2



Pictogram(s):

Signal word: none

Hazard statement(s): H411: Toxic to aquatic life with long lasting effects

Precautionary statement(s): P273: Avoid release to the environment
P501: Dispose of contents/container in accordance with local and national regulations

Other hazards:

Contains 1,2-Benzisothiazoline-3-one, may cause an allergic skin reaction

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredients	CAS Number	Conc (%)	Signal Word	H-Statements
Fludioxonil	131341-86-1	10	Warning	H400 H410
Polymer	78330-21-9	<1.0	Danger	H312, H318, H412
1,2-Benzisothiazoline-3-one	2634-33-5	≥0.025-<0.05	Danger	H290, H302 H314, H317

SECTION 4: FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or a Poisons Helpline and follow the advice given. Show this product label or the Safety Data to the doctor.

IF SWALLOWED: Seek medical attention. DO NOT induce vomiting. Never give anything by mouth to an unconscious person

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Keep warm and at rest. Seek medical attention.

ON SKIN CONTACT: Remove immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water to minimize product contact with skin. Wash contaminated clothing before wearing again. If concerned: Seek medical attention.

IF IN EYES: Rinse gently with water for 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Seek medical attention.

Treatment: No specific antidote. Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing media: Carbon dioxide (CO₂)
Dry powder
Dry sand
Water spray
Foam

Unsuitable Extinguishing media: High volume water jet

Special hazards arising from the substance or mixture
Hazardous combustion products: Product itself is not combustible (Product contains water)

Advice for fire-fighters: In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit

Further Information: Containers exposed to heat (fire) may build up pressure. Use water spray to cool containers. Prevent fire extinguishing water from contaminating surface water or the ground water system.



SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Wear suitable personal protection (PPE) during removal of spillages (see section 8). Stop spills if safe to do so.
- Environmental precautions:** Do not flush into water sources, drains or sewage systems. If product enters sewage or contaminates water sources, inform the relevant authorities.
- 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.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:

- Advice on Safe handling:** For professional use only.
Use only in well-ventilated areas
- Advice on protection against fire and explosion:**
Not flammable under normal conditions of use. The product does not sustain combustion.
- Hygiene measures:** Avoid contact with eyes and skin.
Avoid breathing vapour or spray or aerosol.
Take off contaminated clothing and shoes immediately.
Wash contaminated clothing before re-use.
Do not eat, drink or smoke while working.
Keep away from food, drink and animal feeding stuffs.
Wash hands and face before breaks and when workday is finished.

Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers:**
Store in the closed original container, in a cool, dry, well-ventilated area, away from direct sunlight. Protect from frost.
- Keep original containers, tightly closed, out of sight and reach of children.
- Incompatibilities:** Incompatible with acids and bases.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure limits:

Ingredient	Exposure limit	Time period
Fludioxonil	10 mg/m ³	8 hr TWA

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

- Engineering controls:** Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below exposure limits.



Personal protective equipment:

Wear face shield or goggles with chemical splash protection.
Wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, heavy-duty shoes or boots.
Wear elbow length chemical resistant nitrile or neoprene rubber gloves.
If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear a respirator with filter for vapours.
After each day's use, wash gloves, goggles or face shield, respirator if worn, and contaminated clothing.

Do not re-enter treated areas without protective clothing until spray residue has dried.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- a) Appearance: Red liquid (suspension)
- b) Odour: virtually odourless
- c) Melting point/freezing point: 199.8°C (tech.)
- d) Boiling point/boiling range: Decomposes before boiling (tech.)
- e) Flammability (solid/gas): not flammable
- f) Upper/lower flammability or explosive limits: n/a
- g) Flash point: Does not flash
- h) Auto-ignition temperature: not determined
- i) Decomposition temperature: 306°C (tech.)
- j) pH: 6 – 9 (1% dilution)
-) Kinematic Viscosity: not determined
- k) Solubility: 1.0 mg/L (water, 20°C; tech)
- l) Partition coefficient: Log P_{ow} 4.12 (tech.)
- m) Vapour pressure: 3.9×10^{-4} mPa (tech.)
- n) Relative density: 1.05-1.15 g/mL (at 20°C)
- o) Vapour density: 5.4×10^{-5} Pa $m^3 \text{ mol}^{-1}$ (tech.)
- p) Particle Characteristics: Not determined
- q) Explosive properties: Not explosive
- r) Oxidising properties: Not an oxidiser

SECTION 10: STABILITY AND REACTIVITY

Reactivity Corrosion to metals: Corrosive effects to metal are not anticipated.

Chemical stability The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.
Hazardous polymerisation will not occur.

Conditions to avoid Direct sunlight/UV exposure. Avoid heat sources and extreme temperatures.

Incompatible materials Strong oxidisers, alkalis.

Hazardous decomposition

Products: Does not decompose at ambient temperature. Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

Oral toxicity: LD₅₀ rat: >2000-5000 mg/kg (GHS cat 5)

Dermal toxicity: LD₅₀ rat: >2000-5000 mg/kg (GHS cat 5)



Inhalation toxicity: LC₅₀ rat (4 h) >5.35 mg/L
Skin irritation: Not irritating
Eye irritation: Not irritating
Skin sensitisation: Not a skin sensitiser
(Based on internal study data)

Chronic Effects

Germ cell mutagenicity: Not classified as a mutagen.
Carcinogenicity: Not classified as a carcinogen
Reproductive toxicity: Not classified as a reproductive toxin.
Chronic toxicity: No evidence of long-term chronic effects.

SECTION 12: ECOLOGICAL INFORMATION

Fludioxonil technical material

Birds: LC₅₀ Mallard duck: >2000 mg/kg
Fish toxicity: LC₅₀ 96 h Bluegill sunfish: 0.74 mg/L
Rainbow trout: 0.5 mg/L
Aquatic invertebrates: LC₅₀ 48h *Daphnia magna* 0.40 mg/L
Algal toxicity: EC₅₀ 72 h *Scenedesmus subspicatus* 0.93 mg/L

Bioaccumulation: Does not bioaccumulate.
Stability in water: Fludioxonil is stable in water. Photolytic DT₅₀ in water 19.2 d
Stability in soil: DT₅₀ 31-41 d
Mobility: Fludioxonil has low mobility in soil.

SECTION 13: DISPOSAL CONSIDERATIONS**Waste treatment methods**

Product: Dispose of waste product through an official waste contractor.
Obtain advice from local waste regulation authority.

Contaminated packaging: Triple- or pressure-rinse containers before disposal. Add rinsings to spray tank. Do not let contaminated water enter surface or ground water systems. Do not dispose of undiluted chemicals on-site. Do not burn empty containers. Recycle, or return to supplier through local schemes if applicable. Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORTATION INFORMATION

	ADR/RID	IMDG	IATA
UN Number	UN 3082		
UN Proper Shipping Name	Environmentally hazardous substance, liquid, N.O.S. (contains Fludioxonil)		
Transport Hazard Class	9	9	9
Packaging Group	III	III	III
Environmental Hazard	Yes	Marine Pollutant	Yes



When shipped in single or inner packaging not exceeding 5 LTS or 5 kg, SP A197 (IATA) or SP 375 (ADR/RID) will apply.

When shipped by sea (IMDG) the following clause applies:

Exemption under IMDG clause 2.10.2.7 Marine pollutants 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 per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants provided the packagings meet the general provisions of **4.1.1.1**, **4.1.1.2** and **4.1.1.4** to **4.1.1.8**.

SECTION 15: REGULATORY INFORMATION

No additional regulatory information required for this product

SECTION 16: OTHER INFORMATION

H statements in full:

H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long-lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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

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 handling 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.

Sections 9, 11 and 12 based on available EU and Almandine SA Corporation data

Self-classification of mixture

SDS version: 1.0

Previous version: N/A

Changes to sections from previous version: N/A