

# SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

## 1. IDENTIFICATION

**PRODUCT NAME:** Orbus 4 F  
**DESCRIPTION:** Liquid fungicide  
**EPA REG. NO.:** 91234-98  
**COMPANY IDENTIFICATION:** Atticus, LLC  
 5000 CentreGreen Way, Suite 100  
 Cary, NC 27513

## 2. HAZARD IDENTIFICATION

### WARNING

Causes skin and eye irritation (H315+H320)  
 May cause an allergic skin reaction (H317)  
 Very toxic to aquatic life with long lasting effects (H400+H410)



### HAZARD CLASSIFICATION

Health Hazards	Category	Physical Hazards	Category
Skin Sensitization	1B	None	-
Skin Corrosion / Irritation	2	<b>Environmental Hazards</b>	<b>Category</b>
Eye Damage / Irritation	2B	Hazardous to the aquatic environment, short-term	1
		Hazardous to the aquatic environment, long-term	1

### HAZARDS NOT REQUIRING CLASSIFICATION

None

### PRECAUTIONARY STATEMENTS

Avoid breathing mist or spray. (P261)  
 Wash hands and exposed skin thoroughly after handling. (P264)  
 Contaminated work clothing should not be allowed out of the workplace.  
 Take off contaminated clothing and wash it before reuse. (P272+P362+P364)  
 Wear protective gloves. Refer to Section 8 for specific PPE requirements.  
 (P280)  
 Avoid release to the environment not in accordance with the product label. (P273)  
**IF ON SKIN:** Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Refer to Section 4 for additional medical information. (P302+P352+P332+P313)  
**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. Refer to Section 4 for additional medical information. (P305+P351+P338+P337+313)  
 Specific treatment: See Section 4 for additional medical information. (P321)  
 Collect spillage. (P391)  
 Dispose of contents / container in accordance with local regulations. Refer to the product label for specific disposal instructions. (P501)

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS #	Composition
Fluazinam	3-chloro-N-[3-chloro-2,6-dinitro-4-trifluoromethyl)phenyl]-5-trifluoromethyl-2-pyridinamine (CA)	79622-59-6	40%

## 4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, call SafetyCall: 1-844-685-9173. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-9300.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment advice.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

## 5. FIREFIGHTING MEASURES

**Flash Point:** Not applicable

**Fire and Explosion Hazards:** None known.

**Extinguishing Medium:** Dry Chemical, foam, or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

**Fire Fighting Equipment:** Firefighters should wear full protective clothing and self-contained breathing apparatus.

**Fire Fighting Instructions:** Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

**Hazardous Combustion Products:** During a fire, irritating and possible toxic gases may be generated by thermal decomposition or combustion.

**NFPA Ratings:** Health – 2 / Flammability – 1 / Reactivity - 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document.

**Environmental Precautions:** Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

**Spill Cleanup:** Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spill immediately, observing precautions in Section 8. Cover entire spill with absorbent material and place in a compatible disposal container. Scrub area with hard water detergent (e.g., commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposal.

## 7. HANDLING AND STORAGE

**Handling:** Do not get on skin or on clothing. Avoid contact with eyes. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet. Remove contaminated clothing and wash before use.

**Storage:** Store in a tightly closed container in a cool, dry place. Do not store near food or feed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

**Protective Clothing:** Applicators, flaggers, and other handlers must wear coveralls worn over long-sleeved shirt, long pants, socks and chemical resistant footwear, chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, and protective eyewear. Airblast applicators must also wear chemical-resistant headgear. When mixing and loading, or when cleaning equipment, also wear a chemical resistant apron.

**General:** Do not allow contact of contaminated clothing with unprotected skin. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	yellow liquid
<b>Odor:</b>	pungent
<b>Melting/freezing point:</b>	not available
<b>Boiling point/Boiling range:</b>	not available
<b>Flammability:</b>	not available
<b>Flammability limits (upper/lower):</b>	not available
<b>Flash point:</b>	not available
<b>Auto-ignition temperature:</b>	not available
<b>Decomposition temperature:</b>	not available
<b>pH:</b>	6.0 - 8.0
<b>Kinematic viscosity:</b>	not available
<b>Solubility:</b>	fludioxonil: Insoluble in water
<b>Partition coefficient:</b>	not available
<b>Vapor pressure:</b>	fluazinam: $3.8 \times 10^{-8}$ mmHg (20°C)
<b>Relative Density:</b>	1.23 - 1.63 g/mL
<b>Relative vapor density:</b>	not available
<b>Particle characteristics:</b>	not available

## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Excessive heat or open flame.

**CHEMICAL STABILITY:** Stable under all normal use and storage conditions.

**INCOMPATIBILITY WITH OTHER MATERIALS:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None known.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**The following data is from a similar substance:**

**ORAL TOXICITY (rat LD<sub>50</sub>):** > 5000 mg/kg

**DERMAL TOXICITY (rat LD<sub>50</sub>):** > 2000 mg/kg

**INHALATION TOXICITY (rat LC<sub>50</sub>):** > 2.3 mg/L (4-hr)

**EYE IRRITATION:** Moderately irritating (Rabbit)

**SKIN IRRITATION:** Moderately irritating (Rabbit)

**SKIN SENSITIZATION:** Guinea pig – A positive skin sensitizer

**CARCINOGENICITY:**

**EPA:** Not Listed

**ACGIH:** Not Listed      **NTP:** Not Listed

**IARC:** Not Listed      **OSHA:** Not Listed

**MUTAGENIC TOXICITY:** No data available.

**REPRODUCTIVE TOXICITY:** Fluazinam: no teratogenic effects in animal experiments.

## 12. ECOLOGICAL INFORMATION

This pesticide is toxic to fish and aquatic organisms.

**The following information is for the active ingredient, Fluazinam:**

**AQUATIC TOXICITY**

Fish (Rainbow Trout) (96-hour LC<sub>50</sub>): 0.036 ppm

Invertebrate (Water Flea) Daphnia Magna (48-hour EC<sub>50</sub>): 0.22 ppm

Green Algae (EC<sub>50</sub>): 0.16 ppm

**AVIAN TOXICITY**

Bobwhite Quail (oral LD<sub>50</sub>): 1782 mg/kg

## 13. DISPOSAL CONSIDERATIONS

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used must be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Refer to the product label for specific container disposal instructions.

## 14. TRANSPORT INFORMATION

<b>UN Number:</b>	UN3082
<b>Proper Shipping Name:</b>	Environmentally hazardous substance, liquid, N.O.S. (contains fluazinam)
<b>Transport Hazard Class:</b>	9
<b>Packing Group:</b>	III
<b>Hazard Zone:</b>	A
<b>Marine Pollutant:</b>	Yes <sup>1</sup>
<b>Hazardous Substance RQ:</b>	None
<b>Labels / Placards:</b>	US-DOT: Class 9 Environmentally Hazardous Substance <sup>2</sup> IMDG, IATA: Class 9 Environmentally Hazardous Substance <sup>3</sup>
<b>Emergency Guide:</b>	171 (NAERG – North American Emergency Response Guide)
<b><sup>1</sup> Marine Pollutant Note:</b>	Ground-only shipments are excluded from Marine Pollutant labeling requirements as per 49CFR§172.101 Appendix B(4). For any shipments involving all or part of the transport by vessel, the shipment must be classified as a Marine Pollutant unless a limited quantity exemption applies (see note 3 below).
<b><sup>2</sup> US-DOT Note:</b>	Not regulated for “ground only” shipments.
<b><sup>3</sup> IMDG / IATA Note:</b>	Not regulated when shipped in single or inner packaging ≤ 1.32 gallons (5L).

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## 15. REGULATORY INFORMATION

### FIFRA -

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING.** Causes skin irritation. Harmful if absorbed through skin. Causes moderate eye irritation. Harmful if inhaled or swallowed. Do not get on skin or on clothing. Avoid contact with eyes. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet. Remove contaminated clothing and wash before use.

See inside label booklet for additional precautionary statements.

### ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters or rinsate. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas.

**Surface water advisory:** Do not cultivate within 25 feet of permanent water bodies (lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, and estuaries) so as to allow growth of a vegetative filter strip. Do not apply aerially within 150 ft. of marine/estuarine areas.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

**SARA Title III - Section 302 Extremely Hazardous Substances**  
Not listed

**SARA Title III - Section 311/312 Hazard Categories**  
Immediate (acute), Delayed (chronic)

**SARA Title III - Section 312 Threshold Planning Quantity**

The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

**SARA Title III - Section 313 Reportable Ingredients**  
None

**CERCLA Reportable Quantity (RQ) -**  
None

### CALIFORNIA PROP 65 STATUS -

This product does not contain any chemicals known to the state of California to cause cancer or other reproductive harm.

### CANADA -

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## 16. OTHER INFORMATION

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

To the extent consistent with applicable law, neither Atticus, LLC nor Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ATTICUS, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ATTICUS, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SDS Version: 1.0

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