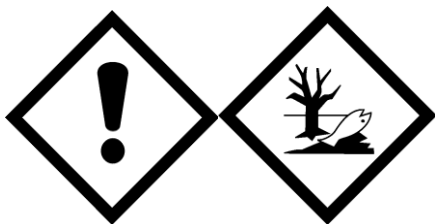


Flute 50 EW Fungicide

Date of Issue: 30 July 2021

1. IDENTIFICATION**Product Identifier:** Flute[®] 50 EW Fungicide**Other Means of Identification:** None**Recommended Use of the Chemical and Restrictions on Use:** Fungicide for agricultural use**Details of Manufacturer or Importer:** AgNova Technologies Pty Ltd
Unit 4, 482 Kingsford Smith Drive
Hamilton, Qld 4007 Australia
(03) 9899 8100
agnova.com.au**Emergency Phone Number:** 1800 033 111 (24 hrs)
Poisons Information Centre 13 11 26**2. HAZARD(S) IDENTIFICATION**

Pictograms: Exclamation mark, environment

Signal Word: 'Warning'

GHS Hazard Class and Category: (as determined by Safe Work Australia)Skin Irritation – Category 2: 'Warning'

Hazard Statement: H315 (Causes skin irritation)

Hazardous to the Aquatic Environment: Long-Term Hazard – Category 2: no signal word

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



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Precautionary Statements:

Prevention

P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear chemical resistant protective gloves.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment (see Safety Directions and First Aid sections on label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage

Storage

No additional information

Disposal

P501 Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

ADG Not classified as Dangerous Goods for Land Transport. Refer
Classification: section 14
SUSMP Poison Schedule 5
Classification: (Standard for Uniform Scheduling of Medicines and Poisons)

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Concentration (%):
Cyflufenamid	180409-60-3	5
Alcohols, C16-18 (even numbered, C18-unsaturated), ethoxylated	68920-66-1	10
Other non-hazardous ingredients		balance

4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (Phone 13 11 26), and follow the advice given. Show this Safety Data Sheet to a doctor.

Description of Necessary First Aid Measures:

Ingestion: Rinse mouth. Do NOT induce vomiting. Call a Poison Centre/doctor if you feel unwell.



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Inhalation:	Remove person to fresh air and keep comfortable for breathing. Call a Poison Centre/doctor if you feel unwell.
Skin Contact:	Remove contaminated clothing and shoes, and wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
Eye Contact:	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/attention.
First Aid Facilities:	Provide washing facilities in the workplace.
Symptoms Caused by Exposure:	Not available
Medical Attention and Special Treatment:	No special antidote. Supportive care. Treatment based on judgment of physician in response to symptoms of patient.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Equipment:	Dry chemicals, carbon dioxide, foam or water spray. Unsuitable extinguishing media : Not known
Specific Hazards Arising from the Chemical:	Thermal decomposition or combustion may produce carbon dioxide, carbon monoxide, hydrogen fluoride and nitrogen oxides.
Special Protective Equipment and Precautions for Firefighters:	Wear self-contained breathing apparatus and complete personal protective equipment. Move containers away from fire areas if it can be done without risk. If impossible to remove containers from fire zone, cool them with water spray. Hazchem Code: 3Z

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective	Wear personal protective equipment. Refer to Section 8 for personal protective equipment. Keep away from all ignition sources. Avoid contact with skin, eyes and clothing. Avoid breathing the mist or
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Equipment and Emergency Procedures: vapours. Evacuate area. Ventilate area.

Environmental Precautions: Prevent this product from entering into drains, ditches or rivers because this product is toxic to aquatic life with long lasting effects.

Methods and Materials for Containment and Cleaning Up: Sweep up, place in containers and holds for waste disposal. Use inert absorbent (e.g. sand or vermiculite) to complete pick-up if necessary. Use vacuum truck if spill is large. Wash out spill-site after material pick-up is complete. Do not discharge to river, sea, lake, waterway or sewer systems directly. Obey local/national/international regulations for health & safety and environmental protection when the accidental spills are treated.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Wear personal protective equipment. Refer to Safety Directions on label and Section 8 of this SDS for personal protective equipment. Keep out of reach of children. Do not breathe mist or vapours. Wash hands and face thoroughly after handling. Avoid contact with skin, eyes and clothing.

Conditions for Safe Storage, including any Incompatibilities: Keep container tightly closed. Store in a cool, dry and well-ventilated place. Avoid direct contact with water, acids or bases.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards: No exposure standard allocated

Biological Monitoring: No data available

Control Banding: No data available

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Engineering Controls: When handled indoors, use general and/or local exhaust ventilation to control vapours/mist.
Provide safety showers and eyewashes.

Individual Protection Measures, for example, Personal Protective Equipment (PPE): Eye and face protection: Use safety goggles.
Skin protection: Wear suitable working clothes, hand protection and boots. Gloves material; e.g. outside: rubber, vinyl chloride resin; inside: cotton, rayon.
Respiratory protection: Appropriate respirator for organic vapours.
Thermal hazards: None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Whitish emulsion solution with no separation and no floating materials

Odour: Aromatic odour

Melting Point/Freezing Point: -10~0°C (This product froze after storage at -10°C for 3 days.)

Initial Boiling Point and Boiling Range: 103°C

Flammability: Not applicable

Upper/Lower Flammability Limits or Explosive Limits: Not available

Flash Point: 112°C (Cleveland open cup)

Auto-ignition Temperature: Self-heating: None below 400°C (EU 92/69/EEC, A.15 (1992))
None below boiling point (103°C) (EU 92/69/EEC, A.9 (1992))

Decomposition Temperature: Not available

pH: 5.0 (original), 5.7 (1% w/v dilution)(CIPAC MT75)

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Kinematic Viscosity:	3.7×10 ⁻⁵ m ² /sec at 40°C (see section 16)
Solubility:	Insoluble in water
Partition Coefficient n-Octanol/Water:	log P _{o/w} = 4.70 at 25°C, pH 6.75
Vapour Pressure:	3.54 × 10 ⁻⁵ Pa at 20°C (as active ingredient)
Relative Density:	1.027 g/L at 20°C (OECD 109)
Vapour Density (air=1):	Not available
Surface Tension:	31.9 mN/m at 1.0 g a.s./L (20°C) 31.8 mN/m at 2.5 g a.s./L (20°C) (OECD 115)
Particle Size Distribution:	Not applicable

10. STABILITY AND REACTIVITY

Reactivity:	The specific test data of the reactivity hazards is not available.
Chemical Stability:	Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur.
Conditions to Avoid:	High temperature.
Incompatible Materials:	Strong oxidizing agents, strong acids or bases.
Hazardous Decomposition Products:	Carbon oxides, nitrogen oxides, methyl sulfide, sulfur dioxide, and hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Oral: LD₅₀ (rat) >5000 mg/kg
Dermal: LD₅₀ (rat) >2000 mg/kg
Inhalation: LC₅₀ (rat) >4.41 mg/L (4 h) (maximum practicable concentration).

Skin Corrosion/Irritation: Dermal (rabbit): Moderate to severe (Effects are well below threshold for classification according to Regulation (EC) No. 1272/2008.)

Serious Eye Damage/Irritation: Eyes (rabbit): Very slight (Effects are well below threshold for classification according to Regulation (EC) No. 1272/2008.)

Respiratory or Skin Sensitisation: Dermal (guinea pig): Negative
Respiratory: Not available

Germ Cell Mutagenicity: For the Product: Not available
Active ingredient:
Ames test: Negative
Chromosomal aberration test: Negative
Cytogenetic test (mouse lymphoma): Negative

Carcinogenicity: For the Product: Not available
Active ingredient:
Negative (rat)
Negative (mouse)

Reproductive Toxicity: Reproductive toxicity
For the Product: Not available
Active ingredient:
Negative (rat)

Teratogenicity
For the Product: Not available
Active ingredient:
Negative (rat)
Negative (rabbit)

Specific Target Organ Toxicity (STOT) – single exposure: Not available



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Specific Target Chronic Toxicity
Organ Toxicity For the Product: Not available
(STOT) – repeated exposure: Active ingredient:
NOAEL (rat): 4.4 mg/kg/day(male), 5.5 mg/kg/day(female) (2 years)
NOAEL (mouse): 62.8 mg/kg/day(male), 9.0 mg/kg/day(female) (1.5 years)

Aspiration Hazard: No data available
Other Information: Not available

12. ECOLOGICAL INFORMATION

Ecotoxicity: Acute Toxicity for Fish (Rainbow trout): LC₅₀: 9.84 mg/L (96 h)
Acute Toxicity for Daphnia: EC₅₀: 9.48 mg/L (48 h)
Acute Toxicity for Algae: ErC₅₀: 1.628 mg/L (72 h)
Chronic Toxicity for Algae: NOEC 0.395 mg/L (72 h)

Persistence and Degradability: For the Product: Not available
Active ingredient: Not readily biodegradable

Bioaccumulative Potential: For the Product: Not available
Active ingredient: BCF 528 at 10 µg/L (Mean of 10 -28 days)

Mobility in Soil: For the Product: Not available
Active ingredient: Low (K_{oc}=1003~2100)

Other Adverse Effects: Hazardous to the ozone layer.
This product does not contain the subject to the Montreal Protocol.

13. DISPOSAL CONSIDERATIONS

Disposal Methods, including Disposal of Containers:

Follow directions on label.

Product to be treated, stored, transported, and disposed of according to local regulations. Do not flush to surface water or sanitary sewer system.

Refer to Section 8 of this SDS for personal protective equipment

Special Precautions for Landfill or Incineration:

None.



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14. TRANSPORT INFORMATION

Transport Classification:	Road and Rail: Not Dangerous Goods under the ADG7 when being transported in IBCs or other receptacles <500 L (kg), (Special Provision AU01). Marine and Air: Classified as Dangerous Goods for transport by sea and air according to the criteria of the UN Model Regulations on the Transport of Dangerous Goods 21 st revised Edition
UN Number:	3082
Proper Shipping Name or Technical Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cyflufenamid mixture)
Transport Hazard Class:	9
Packing Group:	III
Environmental Hazards for Transport Purposes:	Marine pollutant
Special Precautions for User:	None specified
Hazchem Code:	3Z

15. REGULATORY INFORMATION

APVMA	Registered according to the Agricultural and Veterinary Chemicals Act 1994. APVMA Product Number: 66970
SUSMP	Schedule 5

16. OTHER INFORMATION

Prepared in accordance with Safe Work Australia's 'Preparation of safety data sheets for hazardous chemicals; Code of Practice; July 2020'

Date of Preparation or Revision: 30 July 2021

Reason for Revision: 5-year review.
Added, deleted or revised information
Section 3: Ingredient descriptions revised.
Section 4: Details added to first aid measures.
Section 6: Descriptions about accidental release measures were amended or added.
Section 7: Minor amendments.
Section 9: Regarding some items, the data were added or amended.
Section 11: Toxicological data added.
Section 12: Ecological data added. The description about hazardous to the ozone layer was added.
Remark: Regarding Hydrocarbons, C10-C13, aromatics, <1% naphthalene: Though this product contains 18% of Hydrocarbons, C10-C13, aromatics, <1% naphthalene, the viscosity of this product was more than 7×10^{-6} m²/s. Therefore H304 according to Regulation (EC) No 1272/2008 does not apply because the kinematic viscosity of the product is higher than 2×10^{-5} m²/s at 40°C.

Abbreviations and Acronyms: ADG7 – Australian Dangerous Goods Code for Transport by Road and Rail, 7th Edition
APVMA – Australian Pesticides and Veterinary Medicines Authority
GHS – Globally Harmonized System of Classification and Labelling of Chemicals
IBC – Intermediate Bulk Container
SUSMP – Standard for the Uniform Scheduling of Medicines and Poisons

Data Sources: Manufacturer product safety data and published data

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

The opinions expressed herein are those of qualified experts with the manufacturer. Since the use of this information and of these opinions and the conditions of use of this product are not



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within the control of AgNova Technologies Pty Ltd, it is the user's obligation to determine the conditions of safe use of the product.

END OF SDS