



# SAFETY DATA SHEET

## FLUTE®

Date of Issue: 07 October 2014

### 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

**Chemical name of active ingredient(s):** Cyflufenamid in the form of an oil in water emulsion  
**Recommended use:** Agricultural fungicide

**Supplier:** Etec Crop Solutions Limited  
PO Box 51584  
Pakuranga  
Auckland  
Phone 0800 100 325

**Emergency telephone number:** 0800 Poison (0800 764 766) 24 Hours

### 2. HAZARDS IDENTIFICATION

**Hazard Classification:** 6.1E, 6.3A, 6.4A, 6.9B, 9.1B  
Harmful by inhalation  
Irritating to skin. Irritating to eyes. May cause liver damage if swallowed  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Cyflufenamid	180409-60-3	≥ 5.0
Organic solvent	64742-94-5	18.0
Additives		36.3
Preservatives	2634-33-5	0.2
Water		≤ 40.5

### 4. FIRST-AID MEASURES

## Description of necessary first aid measures:

### Effects and symptoms

#### First-aid measures

##### Inhalation:

Remove to fresh air and call a physician.

##### Ingestion:

Do not induce vomiting. Immediately wash out mouth with water and call a physician.

##### Skin contact:

Wash skin with soap and water. If irritation persists, get medical attention.

##### Eye contact:

Immediately flush eyes with plenty of (warm) water for at least 15 minutes. Get medical help if irritation persists.

##### Notes to a physician:

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## 5. FIRE-FIGHTING MEASURES

### HAZCHEM Code:

2XE

### Extinguishing media:

Dry chemicals, carbon dioxide, alcohol foam or water spray.

### Unusual fire and explosion hazards:

Thermal decomposition or combustion may produce carbon dioxide, carbon monoxide, hydrogen fluoride and nitrogen oxides

### Protection of fire-fighters:

Use self-contained breathing apparatus and complete personal protective equipment.

### Other information:

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.

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions:

Refer to section 8 for personal protective equipment.

### Environmental precautions:

Remove ignition sources, and avoid skin and eye contact. Prevent from entering the drains, ditches or rivers. Obey local regulations for health and safety and environment protection when accidental spills are treated. Do not discharge treated water to river, sea, lake, waterway, etc.

### Methods for cleaning up:

Large quantities: Remove with vacuum truck. Wash spill site with soap and plenty of water after material pick-up is complete.

Small quantities: Remove with inert absorbent (e.g. sand or vermiculite), and place in a closed container and hold for waste disposal. Wash spill site with soap and plenty of water after material pick-up is complete.

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## 7. HANDLING AND STORAGE

### Handling:

Refer to section 8 for personal protective equipment. Do not breathe gas/ fumes/ vapour/spray. Avoid contact with skin and eyes. Handle as a combustible liquid.

### Storage:

Keep in container tightly closed. Store in a cool dry place. Avoid direct contact with water, acids or bases.

### Specific use:

The recommendations for specific use are contained in above description.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace Exposure Guidelines

#### Workplace exposure standards:

**Exposure limit values:** Not listed  
**Engineering measures**

#### Exposure control measures:

**Ventilation specification:** Use general and/or local exhaust ventilation to control vapour.

### Personal Protective Equipment

**Detail specifications for equipment:** Respiratory protection: Appropriate respirator for organic compound vapour.  
Hand protection: Gloves material, e.g. outside: rubber, vinyl chloride resin; inside: cotton, rayon.  
Eye protection: Use safety goggles.  
Skin protection: Wear suitable working clothes, hand protection and boots.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State, odour & colour:** Viscous liquid. Off-white to pale yellow. Aromatic odour  
**pH:** NA  
**Vapour Pressure:** NA  
**Freezing/melting point:** NA  
**Boiling Point:** NA  
**Solubility:** Insoluble but easily emulsible  
**Specific gravity or density:** 1.028 (AT 20°C)  
**Flashpoint:** 112°C (Cleaveland open cup)  
**Explosion properties:**  
**Flammability:** Flammable

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## 10. STABILITY AND REACTIVITY

**Stability:**  
**Conditions to avoid:** High temperature.  
**Materials to avoid:** Strong oxidizing agents, strong acids or bases.  
**Hazardous decomposition Products:** Carbon oxides, nitrogen oxides, methyl sulphide, sulphur dioxide, and hydrogen chloride.  
**Hazardous polymerization:**  
**Specific Data:**  
**Hazardous reactions :**

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## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity – Oral:** LD50: >5000 mg/kg

<b>Acute toxicity - Dermal:</b>	LD50: >2000 mg/kg
<b>Acute toxicity – Inhalation:</b>	LC50: >4.41 mg/l (4hr) (maximum practicable concentration)
<b>Skin irritation:</b>	
<b>Eye irritation:</b>	Slight (rabbit)
<b>Dermal:</b>	Moderate (rabbit); Negative (guinea pig).
<b>Carcinogenicity:</b>	
<b>Mutagenicity:</b>	
<b>Ames test:</b>	Negative (as active ingredient)
<b>Chromosomal aberration test</b>	(Chinese hamster lung): Negative (as active ingredient)

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	
<b>Acute toxicity for fish (rainbow trout):</b>	LC50: 9.84 mg/l (96hrs)
<b>Acute toxicity for Daphnia:</b>	EC50: 9.48 mg/l (48hrs)
<b>Acute toxicity for Algae:</b>	EbC50: 1.628 mg/l (72hrs)
<b>Mobility:</b>	Not available
<b>Persistence and degradability:</b>	Not available
<b>Bio-accumulative potential:</b>	Not available

## 13. DISPOSAL CONSIDERATIONS

<b>Methods of disposal :</b>	Do not discharge into waterway or sewer systems unless permission has been obtained by the local authority and suitable dilution has been established. Contaminated empty containers must be disposed of as chemical waste. Obey all local regulations for health and safety and environment protection.
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## 14. TRANSPORT INFORMATION - International transport regulations

<b>UN number:</b>	3082
<b>Class or Division:</b>	9
<b>Sub Class:</b>	
<b>Packing Group:</b>	III
<b>Marine Pollutant:</b>	P
<b>Proper shipping name :</b>	<b>Environmentally hazardous substance, Liquid, N.O.S.</b> (contains cyflufenamid)
<b>Segregation Requirements:</b>	

## 15. REGULATORY INFORMATION

<b>ACVM Registered Number:</b>	Registered pursuant to the ACVM Act 1997, No. P9077
<b>HSNO Approval Code:</b>	HSNO HSR100834

## 16. OTHER INFORMATION

**Additional information:**

**Original Issue Date:** 01 October 2014

**Revision Date:**

**Replaces:**

***Disclaimer***

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