







Insecticide Resistance (IRAC) Classification	Not applicable
Fungicide Resistance (FRAC) Classification	33
Physical State	Colourless powder

Formulations:

Property 	Value
Example manufacturers of products using this active	<ul style="list-style-type: none"> • Certis • Standon • FCC • King Tech Corp
Example products using this active	<ul style="list-style-type: none"> • Aliette 80 WG • Fullstop • Pilarfarm • Chipco aliette WDG
Associated substances	<ul style="list-style-type: none"> • fosetyl
UK LERAP status	None
Formulation and application details	Often supplied as wettable granules that are mixed with water and applied as a spray or used as a seed treatment.

ENVIRONMENTAL FATE

Property 	Value	Source/Quality Score/Other Information 	Interpretation 
Solubility - In water at 20°C (mg l ⁻¹)	110000	A5	High
Solubility - In organic solvents at 20°C (mg l ⁻¹)	1	A5 - n-Heptane	-
	6	A5 - Acetone	-
	1	A5 - Xylene	-
	805	A5 - Methanol	-
Melting Point (°C)	215	A5	-
Boiling Point (°C)	Decomposes before boiling	A5	-
Degradation point (°C)	277	A5	-
Flashpoint (°C)	Not highly flammable	A5	-
Octanol-water partition coefficient at pH 7, 20°C	P: 7.94 X 10 ⁻⁰³	Calculated	-
	Log P: -2.1	A5	Low
Bulk density (g ml ⁻¹)/Specific gravity	1.53	A5	-
Dissociation constant (pKa) at 25°C	4.7	A5	-
	Note: Weak acid		

Vapour pressure at 25°C (mPa)		1.00 X 10 ⁻⁰⁴	A5	Volatile
Henry's law constant at 25°C (Pa m ³ mol ⁻¹)		3.20 X 10 ⁻¹⁰	A5	Non-volatile
Henry's law constant at 20°C (dimensionless)		1.55 X 10 ⁻¹¹	K3	Non-volatile
Soil degradation (days) (aerobic)	DT50 (typical):	0.1 	A5	Non-persistent
	DT50 (lab at 20°C):	0.1	A5	Non-persistent
	DT50 (field):	0.04	H4	Non-persistent
	DT90 (lab at 20°C):	4.0	A3	-
	DT90 (field):	-	-	-
	Note:	Other sources: DT50 1.0 days (DW4)		
Aqueous photolysis DT50 (days) at pH 7	Value:	Stable	A5	Stable
	Note:	-		
Aqueous hydrolysis DT50 (days) at 20°C and pH 7	Value:	Stable	A5	Very persistent
	Note:	Stable pH 5 to pH 9		
Water-Sediment DT50 (days)		4.2	A5	Fast
Water phase only DT50 (days)		4	A5	Moderately fast
GUS leaching potential index 		-0.77	Calculated	Low leachability
SCI-GROW groundwater index (µg l ⁻¹) for a 1 kg ha ⁻¹ or 1 l ha ⁻¹ application rate 	Value:	1.60 X 10 ⁻⁰⁶	Calculated	-
	Note:	-		
Potential for particle bound transport index 		-	Calculated	Low
Koc - Organic-carbon sorption constant (ml g ⁻¹)		1703	A5	Slightly mobile
		pH sensitivity: None		
		Note: EU dossier: Not adsorbed; Other sources: 20.0 mL/g (DW4)		
Freundlich isotherm	Kf:	35.6	A5	-
	1/n:	0.61		-
	Note:	-		
Maximum UV-vis absorption L mol ⁻¹ cm ⁻¹		[No UV absorption from 190-800nm]	A5	-

Key metabolites:




Metabolite	Formation Medium	Estimated Maximum	91/414 Relevancy
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ethanol 	Soil	Occurrence Fraction	 Major fraction, Not relevant
		0.780	

Other known metabolites:

Metabolite name and reference	Aliases	Formation Medium / Rate	Estimated Maximum Occurrence Fraction
Phosphorous acid	H3PO3 Note: Rat oral LD50 3624 mg kg ⁻¹ bw	Plant; Soil	-

ECOTOXICOLOGY

Property 	Value	Source/Quality Score/Other Information 	Interpretation 
Bio-concentration factor	BCF: - CT50 (days): Not available	A5 Low risk	-
Bioaccumulation potential	-	Calculated	Low
Mammals - Acute oral LD50 (mg kg ⁻¹)	> 2000	A5 Rat	Moderate
Mammals - Short term dietary NOEL (mg kg ⁻¹):	> 1424	A5 Rat	Moderate
(ppm diet):	-		-
Birds - Acute LD50 (mg kg ⁻¹)	> 8000	A5 <i>Colinus virginianus</i>	Low
Birds - Short term dietary (LC50/LD50)	> 20000 mg/kg feed	A5 <i>Colinus virginianus</i>	-
Fish - Acute 96 hour LC50 (mg l ⁻¹)	> 122	A5 <i>Oncorhynchus mykiss</i>	Low
Fish - Chronic 21 day NOEC (mg l ⁻¹)	> 100	A5 <i>Oncorhynchus mykiss</i>	-
Aquatic invertebrates - Acute 48 hour EC50 (mg l ⁻¹)	> 100	A5 <i>Daphnia magna</i>	Moderate
Aquatic invertebrates - Chronic 21 day NOEC (mg l ⁻¹)	17	A5 <i>Daphnia magna</i>	-
Aquatic crustaceans - Acute 96 hour LC50 (mg l ⁻¹)	-	-	-
Sediment dwelling organisms - Acute 96 hour LC50 (mg l ⁻¹)	-	-	-
Sediment dwelling organisms - Chronic 28 day NOEC, static, water (mg l ⁻¹)	-	-	-

Sediment dwelling organisms - Chronic 28 day NOEC, sediment (mg kg ⁻¹)	-	-	-	-
Aquatic plants - Acute 7 day EC50, biomass (mg l ⁻¹)	79.7		A5 <i>Lemna gibba</i>	Low
Algae - Acute 72 hour EC50, growth (mg l ⁻¹)	5.9		A5 <i>Scenedesmus acutus</i>	Moderate
Algae - Chronic 96 hour NOEC, growth (mg l ⁻¹)	1		Q2 Unknown species	Moderate
Honeybees - Acute 48 hour LD50 (µg bee ⁻¹)	462		A5 Oral	Low
Earthworms - Acute 14 day LC50 (mg kg ⁻¹)	> 1000		A5	Moderate
Earthworms - Chronic 14 day NOEC, reproduction (mg kg ⁻¹)	-		-	-
Other soil macro-organisms - e.g. Collembola	LR50 / EC50 / NOEC / % Effect	-	-	-
Other arthropod (1)	LR50 g ha ⁻¹ : % Effect:	80000 30.2	48 hour A5 <i>Aphidius rhopalosiphi</i> , adult Mortality Parasitism Dose: 5 kg ha ⁻¹ A5 <i>Aphidius rhopalosiphi</i>	Harmless at 1 kg ha ⁻¹ Moderately harmful
Other arthropod (2)	LR50 g ha ⁻¹ : % Effect:	- 86.7 100	- Mortality Reproduction Dose: 18.56 kg ha ⁻¹ A5 <i>Typhlodromus pyri</i>	- Harmful
Soil micro-organisms		Nitrogen mineralisation: No significant effect Carbon mineralisation: No significant effect	A5 [Dose: 20 kg ha ⁻¹]	-
Mesocosm study data	NOEAEC mg l ⁻¹ : NOEAEC mg l ⁻¹ :	- -	- -	- -

HUMAN HEALTH AND PROTECTION

General:

Property	Value	Source/Quality Score/Other Information	Interpretation

Mammals - Acute oral LD50 (mg kg ⁻¹)	> 2000	A5 Rat	Moderate
Mammals - Dermal LD50 (mg kg ⁻¹ body weight)	> 2000	A5 Rat	-
Mammals - Inhalation LC50 (mg l ⁻¹)	> 5.11	A5 Rat	-
ADI - Acceptable Daily Intake (mg kg ⁻¹ bw day ⁻¹)	3.0	A5 SF=100	-
ARfD - Acute Reference Dose (mg kg ⁻¹ bw day ⁻¹)	None allocated	A5	-
AOEL - Acceptable Operator Exposure Level - Systemic (mg kg ⁻¹ bw day ⁻¹)	5.0	A5 Rat, 90 day, SF=100	-
Dermal penetration studies (%)	1.0	A5	-
Dangerous Substances Directive 76/464	List II	-	-
Exposure Limits	-	-	-
Exposure Routes	Public: [Negligible risk to bystanders] Occupational: [Negligible risk of operator and other worker exposure but occupational exposure may occur through inhalation and dermal contact]		
Examples of European MRLs (mg kg ⁻¹)	Value: Oranges: 20; Grapes and cucumbers: 60; Mandarins: 80 Note: [A5 EU dossier proposals] For the EU pesticides database click here		
Drinking Water MAC (µg l ⁻¹)	0.1	EU Dir 89/778/EC limit; Calc MAC=8940 µg/l; A5	-

Health issues:

Carcinogen	Endocrine disrupter	Reproduction / development effects	Acetyl cholinesterase inhibitor	Neurotoxicant	Respiratory tract irritant	Skin irritant	Eye irritant
?	-	X	?	?	✓	X	✓
General human health issues		[May cause nausea, vomiting and diarrhea if ingested], [May cause cough, tachypnea and wheezing if inhaled]					

- ✓ : Yes, known to cause a problem
 X : No, known not to cause a problem
 ? : Possibly, status not identified
 - : No data

Handling issues:

Property	Value	Source/Quality Score/Other Information	Interpretation
General	[Not explosive]		
EC Risk Classification	[Xi - Irritant: R41]		
EC Safety Classification	S2, S26, S39, S46		

WHO Classification	U	-	Unlikely to present acute hazard in normal use
US EPA Classification (formulation)	III	-	Caution - Slightly toxic
UN Number	-		
Waste disposal & packaging	-		



TRANSLATIONS

Language	Name
English	fosetyl-aluminium
French	forsetyl-al
German	Fosetyl-Al
Danish	fosetyl-al
Italian	fosetil-alluminio
Spanish	fosetil-Al
Greek	-
Slovenian	fosetil-aluminij
Polish	fosetyl glinowy
Swedish	fosetylaluminium
Hungarian	fosetil-al
Dutch	fosetyl-aluminium

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