

CLAYTON PLANT PROTECTION

CLAYTON VITIS Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 22Apr2015

This version replaces all previous versions.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Clayton Vitis

Fenpyrazamine, 500 g/kg water dispersible granules

GIFAP Code : WG. EC number: not applicable

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

Fungicide (agricultural use) Not for public use

1.3. Details of the supplier of the safety data sheet

Clayton Plant Protection (UK) Ltd., Bracetown Business Park, Clonee, Dublin 15. Ireland.

Tel: (00 353) 1 8210127 www.cpp.ag Email: info@cpp.ag

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classified as hazardous according to:

- EU directive 67/548/EEC modified by Directive 2001/59/EC (results of the experimental studies),
- directives 1999/45/EC, 2001/60/EC, 2006/8/EC (classification based on the concentration of active substance and ingredients),
- directive 2003/82/EC for pesticides (special risks and safety precautions).



Symbol(s)

R(isk) phrase(s)

DANGEROUS FOR THE ENVIRONMENT (N)

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

2.2. Label elements



Symbol(s)

R(isk) phrase(s)

DANGEROUS FOR THE ENVIRONMENT (N)

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S(afety) phrase(s)

S57: Use appropriate container to avoid environmental contamination

Special risks and safety precautions (directive 91/414/EEC):

General provisions

SP 1: Do not contaminate water with the product or its container (Do not clean application equipment near surface water).

Specific safety precautions

SPe 3: To protect aquatic organisms respect an unsprayed buffer zone of (as indicated on the label) to surface water bodies.

2.3. Other hazards

none known

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. This product is to be considered as a mixture in conformance to EC directives.

Composition/Information on hazardous ingredients

Number	% w/w	CAS number	Chemical name
1	50	473798-59-3	S-allyl 5-amino-2-isopropyl-4-(2-methylphenyl)-3-oxo-2,3-dihydro-1H-pyrazole-1-carbothioate
2	>1	mixture	Dispersing agent

Number	EC number	Annex-1 listing	Regl 1272/2008	Pict.	Hazard statements	Symbol 2001/59/EC	R phrase(s)
1	not assigned	no	GHS09		H411	N	R51/53
2	(*)		ND		ND	Xi	R36, R52/53

Other information

(*) All components are registered in EINECS/ELINCS.

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4. FIRST AID MEASURES

4.1. Description of first aid measures

- General** In cases of doubt, seek medical attention.
- Inhalation** Move to fresh air. If symptoms persist, seek medical advice.
- Skin** Remove contaminated clothing. Wash immediately with soap and water.
- Eye** Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.
- Ingestion** Rinse mouth. Never induce vomiting in unconscious or confused persons. Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed No typical symptoms and effects known.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment is advised.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

- Suitable Extinguishing media** Dry chemical powder, carbon dioxide, sand, foam.
- Unsuitable extinguishing media** none known.

5.2. Special hazards arising from the substance or mixture

May emit toxic and corrosive fumes under fire conditions; possible generation of carbon monoxide (CO) and sulphur oxides (SOx) and nitrogen oxides (NOx).

- 5.3. Advice for fire-fighters** Wear self-contained breathing apparatus.
Wear suitable protective clothing and eye/face protection.

Other information Water used to extinguish a fire should not be allowed to enter the drainage system or water courses

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel Do not breathe dust. Wear protective gloves, safety goggles or face shield and suitable protective clothing. Remove ignition sources. Evacuate the danger area.

For emergency responders Do not breathe dust. Wear protective gloves (nitrile), safety goggles or face shield and suitable protective clothing. Remove of ignition sources. Evacuate the danger area or consult an expert.

6.2. Environmental precautions Do not allow to escape into sewage system or water courses. Do not wash residues into drains or other waterways.

6.3. Methods and material for containment and cleaning up

Containment of a spill Do not allow to escape into sewage system or water courses.

Clean-up procedures Clean up spills immediately. Sweep up and place into sealable containers. Dig up heavily contaminated soil and place into drums. Use a damp cloth to clean floors and other objects, and also place in sealable container. Dispose of all waste and contaminated clothing in the same manner as waste chemicals (i.e. via an authorized disposal facility). Do not wash residues into drains or other waterways.

6.4. Reference to other sections For personal protection see section 8.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling The usual precautions for handling chemicals should be observed. For personal protection see section 8.

Fire and explosion prevention May form explosive dust cloud.

7.2. Conditions for safe storage, including any incompatibilities

Storage requirements Store in a dry and cool place. Keep container in a well-ventilated place. Keep away from heat. Keep away from food, drink and animal feeding stuffs. Do not drink, eat and smoke in work areas.

Other information Do not mix with water (except for the normal preparation).

7.3. Specific end use(s) see label on the container.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters There is no national exposure limit for this product.
No chemical safety report is required for this kind of product.

8.2. Exposure controls

Appropriate Engineering controls Provide adequate ventilation.
Individual protection measures
Respiratory In case of dust formation, use dust mask.
Hand Wear protective gloves of nitrile
Eye Wear safety goggles or face shield.
Skin and body Wear suitable protective clothing.
Other information Launder clothes before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Name *Fenpyrazamine, 500 g/kg water dispersible granules*

9.1 Information on basic physical and chemical properties

Appearance solid, small spherical granules (Visual assessment)
Colour brown (Visual assessment)
Odour chemical odour (Olfactory assessment)
Odour threshold not determined
pH value 7.28 (1% dispersion in water, 21-23°C) (CIPAC MT 75.3)
Melting point/freezing point not determined
Initial boiling point & boiling range not applicable
Flash point not applicable
Evaporation rate not applicable
Flammability not "highly flammable" (EEC A.10)
Upper/lower flammability or explosive limits not determined
Vapour pressure not applicable
Vapour density not applicable
Relative density not determined
Bulk density 0.6 g/ml (CIPAC MT 186)
Solubility in water dispersible in water (solubility of fenpyrazamine = 20.4 mg/l; 20°C) (OECD 105)
Solubility in other solvents not applicable
Partition coefficient n-octanol/water not applicable (fenpyrazamine: log Pow = 3.52 ; 25°C ; OECD 107)
Autoignition temperature no-self ignition up to 400°C (EEC A.16)
Decomposition temperature the active substance decomposes at temperatures >240°C (expert judgment)
Dynamic viscosity not applicable
Kinematic viscosity not applicable
Explosive properties not explosive (EEC A.14)
Oxidising properties not oxidizing (EEC A.17)

9.2. Other information

Relative vapour density (air = 1) not applicable
Surface Tension not applicable

10. STABILITY AND REACTIVITY

10.1. Reactivity Stable under recommended storage and handling conditions (see also section 7).

10.2. Chemical stability Stable for a minimum of 2 years under recommended storage and handling conditions (see section 7).

10.3. Possibility of hazardous reactions None known

10.4. Conditions to avoid Avoid high temperature, light, humidity

10.5. Incompatible materials none known.

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10.6. Hazardous decomposition products

May emit toxic and corrosive fumes under fire conditions ; possible generation of carbon monoxide (CO) and sulphur oxides (SOx) and nitrogen oxides (NOx) (in contact with open fire).

11. TOXICOLOGICAL INFORMATION

Name **Fenpyrazamine, 500 g/kg water dispersible granules**

11.1. Information on toxicological effects Acute toxicity

Oral LD50 rat: > 2000 mg/kg (OECD 423)
Dermal LD50 rat: > 2000 mg/kg (OECD 402)
Inhalation LC50 rat (4-hours): > 1.97 mg/l (nose-only ; maximum attainable concentration) (OECD 403)

Irritation

Skin not irritating (OECD 404)

Eye not irritating (OECD 405)

Sensitization not sensitizing (Buehler test) (OECD 406)

The following data are applicable to the ingredient(s) listed below :

Name **Active substance Fenpyrazamine, technical grade**

Other toxicological information - Genotoxicity: not genotoxic. (OECD 471, 473, 476, 474)
- Carcinogenicity tests in rats and mice: no carcinogenic effect. (OECD 453, 451)
- Multigeneration reproduction study: negative (OECD 416)
- Developmental toxicity in rat and rabbit: not teratogenic, not embryotoxic. (OECD 414)

Based on the available data, no classification criteria are met for any of these hazard classes.

Information on likely routes of exposure This product is for agricultural use, therefore the most probable routes of exposure are via skin or inhalation.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Name **Fenpyrazamine, 500 g/kg water dispersible granules**

Fish Acute toxicity, 96h-LC50 (*Oncorhynchus mykiss*): 14.6 mg/l (7.3 mg a.s./l) (OECD 203)

Daphnia Acute toxicity, 48h-EC50 (*Daphnia magna*): 5.2 mg/l (2.6 mg a.s./l)

Algae Acute toxicity, EC50 (*Pseudokirchneriella subcapitata*) : 72h-ECb50: 0.56 mg/l (0.28 mg a.s./l) (OECD 201)
72h-ErC50: 1.3 mg/l (0.67 mg a.s./l) (OECD 201)

Bees Acute oral toxicity, 48h-LD50 (*Apis mellifera*): 59.7 µg a.s./bee (OECD 213)

Acute contact toxicity, 48h-LD50 (*Apis mellifera*): > 100 µg a.s./bee (OECD 214)

The following data are applicable to the ingredient(s) listed below :

Name **Active substance Fenpyrazamine technical grade**

Daphnia Acute toxicity, 48h-EC50 (*Daphnia magna*) : 5.5 mg/l (OECD 202)

Chronic toxicity, 21d-NOEC (*Daphnia magna*) : 0.34 mg a.s./l (OECD 211)

Sediment dwelling midge Chronic toxicity, 28d-NOEC (*Chironomus riparius*) : 0.560 mg a.s./l (OECD 219)

Birds Acute toxicity, LD50, Northern Bobwhite quail (*Colinus virginianus*) : > 2000 mg/kg bw (OPPTS 850.2100)
Dietary toxicity (5 days), LC50: (OPPTS Guideline 850.2200)

Northern Bobwhite quail (*Colinus virginianus*) : > 954 mg/kg bw/day

Mallard duck (*Anas platyrhynchos*): > 967 mg/kg bw/day

Earthworm Acute toxicity, 14d-LC50 (*Eisenia foetida*): > 800 mg/kg soil. (OECD 207)

Soil microorganisms No significant impact on carbon mineralization or nitrogen transformation at up to 4.0 mg a.s./kg dry soil [OECD 216, 217 (2000)]

12.2. Persistence and degradability

The following data are applicable to the ingredient(s) listed below :

Name **Active substance Fenpyrazamine technical grade**

Degradation Biotic Not readily biodegradable (OECD No. 301 B).

Degradation Abiotic Photodegradation: DT50 < 2 days (EPA Sub-division N, Section 161-2)

Hydrolysis (EEC Method C7): pH4: stable (25°C) pH7: 20-25°C DT50 > 1 year

pH9: 20°C DT50 = 24 days ; 25°C DT50 = 11 days.



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Biological methods for sewage treatment EC50 activated sludge: > 1000 mg/l (OECD 209)

12.3. Bioaccumulative potential

The following data are applicable to the ingredient(s) listed below :

Name *Active substance Fenpyrazamine technical grade*
Bioaccumulation Partition coefficient n-octanol/water log Pow : 3.52 (25°C) (OECD 305)
Bio Concentration Factor (BCF), exposure 28 days Bluegill Sunfish (*Lepomis macrochirus*)
: 283 – 289 (depuration time: CT50 <1 day - whole fish) (OECD 305)

12.4. Mobility in soil

The following data are applicable to the ingredient(s) listed below :

Name *Active substance Fenpyrazamine technical grade*
Adsorption K_{Foc} values : 112-731 ml/g (mean 310 ml/g, mean 1/n = 0.91)
Desorption $K_{Foc-des}$ values: 133-954 ml/g (mean 384 ml/g, mean 1/n= 0.911)
Therefore the substance is slightly to moderately mobile. (OECD 106, January 2000).

12.5. Results of PBT and vPvB assessment : not required (no chemical safety report required).

12.6. Other adverse effects no other known adverse effects on the environment.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Substance and/or Mixture According to local regulations. For further advice contact manufacturer.

Contaminated packaging According to local regulations.

14. TRANSPORT INFORMATION

Land transport ADR/RID, Sea transport IMO/IMDG, Air transport ICAO-TI/IATA-DGR:

14.1. UN Number 3077
14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains: 50% fenpyrazamine)
14.3. Transport hazard class(es)
Land transport ADR/RID class: 9 label: 3 + 6.1
IMO/IMDG code class: 9
Air transport ICAO-TI/IATA-DGR class: 9
14.4. Packing group III
14.5. Environmental hazards Marine pollutant: yes
14.6. Special precautions for user EMS: F-A, S-F
no other special precaution required.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code : not applicable

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

There is no specific regulation/legislation for this mixture.

15.2. Chemical safety assessment

No chemical safety assessment is required for this mixture.

16. OTHER INFORMATION

Method for evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 used for the purpose of classification: Classification based on tests and on the properties of the active substance.

Full text of risk phrase(s) used in this document:

R36: Irritating to eyes

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of hazard statement(s) used in this document: H411: Toxic to aquatic life with long lasting effects

The above information is intended to give general health and safety guidance on the storage and transport of the product. It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with. The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.