



SUMITOMO CHEMICAL (U.K.) PLC

SAFETY DATA SHEET PROLECTUS®

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name PROLECTUS®
Name Fenpyrazamine, 500 g/kg water dispersible granule
GIFAP Code WG
Synonyms; trade names

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

Identified uses Fungicide (agricultural use)
Uses advised against Not for public use

1.3. Details of the supplier of the safety data sheet

Supplier Sumitomo Chemical (UK) Plc
Hythe House
200 Shepherds Bush Road
Hammersmith
London
W6 7NL
regulatory@scuk.sumitomo-chem.co.uk
+44 (0)203 538 3099

1.4. Emergency telephone number

Emergency telephone +44 (0)1235 239670 (EU)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not classified
Health hazards Not classified
Environmental hazards Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram



Signal word Warning
Hazard statements H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements P391 Collect spillage.

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P501 Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

Supplemental label information

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Special risks and safety precautions (Commission Regulation (EU) 547/2011): General provisions

SP1 Do not contaminate water with the product or its container. (Do not clean application equipment near surface water.)

Special risks and safety precautions (Commission Regulation (EU) 547/2011): Specific safety precautions

SPe3 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.

SECTION 3: Composition/information on ingredients

3.1. Substances

Classification according to
Regl 1272/2008

3.2 Mixtures

Classification according to
Regl 1272/2008

S-allyl 5-amino-2-isopropyl-4-(2-methylphenyl)-3-oxo-2,3-dihydro-1H-pyrazole-1-carbothioate

50.0%

CAS number: 473798-59-3

M factor (Acute) = 10

M factor (Chronic) = 1

Classification

Aquatic Acute 1 - H400

Aquatic Chronic 1 - H410

Maleic acid, potassium salt

1-5%

CAS number: 10237-70-4

Classification

Skin Irrit. 2 - H315

Eye Irrit. 2 – H319

STOT SE 3 – H335

The full text for all hazard statements is displayed in Section 16.

Other information

Code ID : PHIL B10-1

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

If in doubt, get medical attention promptly.

Inhalation

Move affected person to fresh air at once. If symptoms persist, seek medical advice.

Ingestion

Rinse mouth. Never induce vomiting in unconscious or confused persons. Get medical attention

Skin contact

Remove contaminated clothing and rinse skin thoroughly with water.

Eye contact

Rinse immediately and as long as possible with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.

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4.2. Most important symptoms and effects, both acute and delayed

General information Dust may be irritating to the respiratory tract and cause symptoms of bronchitis.

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

Notes for the doctor Symptomatic treatment is advised.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Dry chemical powder. Carbon dioxide (CO₂). Sand. Foam.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products In case of fire: Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Sulphurous gases (SO_x). Nitrous gases (NO_x).

5.3. Advice for firefighters

Protective actions during firefighting Water used to extinguish a fire should not be allowed to enter the drainage system or watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 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 nitrile gloves, safety goggles or face shield, and suitable protective clothing. Remove ignition sources. Evacuate the danger area or consult an expert.

6.2. Environmental precautions

Environmental precautions Do not allow escape into sewage system or watercourses. 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 escape into sewage system or watercourses.

Methods for cleaning up 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

Reference to other sections For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Fire and explosion prevention No specific recommendations.

Usage precautions Follow precautions for safe handling described in this safety data sheet. Avoid spilling. Do not allow to escape into sewage system or water courses.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry and cool place. Keep container in a well-ventilated place. Keep away from food, drink and animal feedingstuffs.

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Other information

Do not mix with water (except for the normal preparation). Store away from incompatible materials (see Section 10).

7.3. Specific end use(s)

Specific end use(s)

See label on the container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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.

Eye/face protection

Wear safety goggles or face shield.

Hand protection

Wear protective nitrile gloves.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash contaminated clothing before reuse.

Respiratory protection

In case of dust formation, use dust mask.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Name	Fenpyrazamine, 500 g/kg water dispersible granules (Code ID: B10-1)
Appearance	Solid. Small spherical granules (visual inspection)
Colour	Brown (visual inspection)
Odour	Chemical odour (Olfactory assessment)
Odour threshold	Not determined
pH	pH (diluted solution): 7.28 (1%) @ 21-23°C (CIPAC MT 75.2)
Melting point	Not determined
Initial boiling point and range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	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(ies)	Dispersible in water. (Fenpyrazamine : Solubility : 20.4 mg/l water @ 20°C) (OECD 105)
Solubility in other solvents	Not applicable
Partition coefficient	Not applicable. (Fenpyrazamine : log Pow: 3.52 @ 25°C) (OECD 107)
Auto-ignition temperature	Not auto-flammable up to 400°C (EEC A.16)
Decomposition temperature	Not determined. (Fenpyrazamine : > 240°C) (Expert judgement)
Viscosity	Not applicable
Explosive properties	Not explosive. (EEC A.14)
Oxidising properties	Not oxidising. (EEC A.17)

9.2. Other information

Relative vapour density (air = 1)

Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

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Reactivity Stable under recommended storage and handling conditions. See also section 7.

10.2. Chemical stability

Stability Stable for a minimum of 2 years under recommended storage and handling conditions. See section 7.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known.

10.4. Conditions to avoid

Conditions to avoid Avoid high temperature, light, humidity.

10.5. Incompatible materials

Materials to avoid None known.

10.6. Hazardous decomposition products

Hazardous decomposition products In case of fire: Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Sulphurous gases (SOx). Nitrous gases (NOx). See also section 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Name Fenpyrazamine, 500 g/kg water dispersible granules (Code ID: B10-1)

Acute toxicity - oral

Acute toxicity - oral LD₅₀: >2000 mg/kg, Oral, Rat (OECD 423)

Acute toxicity - dermal

Acute toxicity - dermal LD₅₀: >2000 mg/kg, Dermal, Rat (OECD 402)

Acute toxicity - inhalation

Acute toxicity - inhalation LC₅₀, 4 hours: > 1.97 mg/l, nose only, maximum feasible concentration, Inhalation, Rat (OECD 403)

Skin corrosion/irritation

Skin corrosion/irritation Not irritating (OECD 404)

Serious eye damage/irritation

Serious eye damage/irritation Not irritating (OECD 405)

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Not sensitising. (OECD 406)

Toxicological information on ingredients

Name Active substance; Fenpyrazamine, technical grade

Acute toxicity - oral

Acute toxicity - oral LD₅₀: >2000 mg/kg, Oral, Rat (OECD 423)

Acute toxicity - dermal

Acute toxicity - dermal LD₅₀: >2000 mg/kg, Dermal, Rat (OECD 402)

Acute toxicity - inhalation

Acute toxicity - inhalation LC₅₀, 4 hours: > 4.8 mg/l, nose only, maximum feasible concentration, Inhalation, Rat (OECD 403)

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. (OECD 404)

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. (OECD 405)

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. (EEC B.6)

Germ cell mutagenicity

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Genotoxicity – in vitro	Negative
Genotoxicity – in vivo	Negative
<u>Carcinogenicity</u>	
Carcinogenicity	(rats, mice): No carcinogenic effect.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Multigeneration study: Negative. Oral, Rat (OECD 416)
Reproductive toxicity - development	Teratogenicity: Negative. Oral, Rabbit (OECD 414)
General information	Based on the available data, no classification criteria are met for any of these hazard classes.
Route of exposure	This product is for agricultural use; therefore, the most probable routes of exposure are via skin or inhalation.

SECTION 12: Ecological information**12.1. Toxicity**

Name	Fenpyrazamine, 500 g/kg water dispersible granules (Code ID: B10-1)
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 18 mg/l, <i>Onchorhynchus mykiss</i> (Rainbow trout) (OECD 203)
Acute toxicity - aquatic invertebrates	EC ₅₀ 48 hours: 5.7 mg/l <i>Daphnia magna</i> (OECD 202)
Acute toxicity - algae	EC _{b50} 72 hours: 0.56 mg/l, <i>Pseudokirchneriella subcapitata</i> EC _{r50} , 72 hours: 1.3 mg/l, <i>Pseudokirchneriella subcapitata</i> NOEC _{b&y} , 72 hours: 0.037 mg/l, <i>Pseudokirchneriella subcapitata</i> NOEC _r , 72 hours: 0.58 mg/l, <i>Pseudokirchneriella subcapitata</i> (OECD 201)
Acute toxicity - terrestrial	LD ₅₀ , 48 hours, oral: 59.7 µg/bee <i>Apis mellifera</i> (Honeybee) (OECD 213) LD ₅₀ , 48 hours, contact: >100 µg/bee <i>Apis mellifera</i> (Honeybee) (OECD 214)

Ecological information on ingredients

Name	Active substance; Fenpyrazamine, technical grade
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.01 < LE(C) ₅₀ ≤ 0.1
M factor (Acute)	10
Acute toxicity - fish	LC ₅₀ , 96 hours: 5.2 mg/l, <i>Onchorhynchus mykiss</i> (Rainbow trout) (OECD 203) LC ₅₀ , 96 hours: 5.4 mg/l, <i>Lepomis macrochirus</i> (Bluegill) (OECD 203)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 5.5 mg/l, <i>Daphnia magna</i> (OECD 202)
Acute toxicity - algae	EC _{b50} 72 hours: 0.42 mg/l, <i>Pseudokirchneriella subcapitata</i> EC _{r50} , 72 hours: >0.90 mg/l, <i>Pseudokirchneriella subcapitata</i> NOEC _{r&b} , 72 hours: 0.22 mg/l, <i>Pseudokirchneriella subcapitata</i> (OECD 201) EC _{r50} , 96 hours: 0.034 mg/l, <i>Skeletonema costatum</i> NOEC _r , 96 hours: 0.011 mg/l, <i>Skeletonema costatum</i> EC _{f50} , 96 hours: 0.202 mg/l, <i>Navicula pelliculosa</i> NOEC _r , 96 hours: 0.074 mg/l, <i>Navicula pelliculosa</i>
Acute toxicity – microorganisms	EC ₅₀ , 3 hours: >1000 mg/l, Activated sludge (OECD 209)
Dietary toxicity	LC ₅₀ , 5 days: >954 mg/kg bw/day, <i>Colinus virginianus</i> (Bobwhite quail) (OPPTS Guideline 850.2200) LC ₅₀ , 5 days: >967 mg/kg bw/day, <i>Anas platyrhynchos</i> (Mallard duck) (OPPTS Guideline 850.2200)
Acute toxicity - terrestrial	LD ₅₀ , 48 hours, oral, contact: >100 µg/bee <i>Apis mellifera</i> (Honeybee) (OECD 213, 214) LD ₅₀ , single dose oral: >2000 mg/kg bw, <i>Colinus virginianus</i> (Bobwhite quail) (OPPTS Guideline 850.2100) LC ₅₀ , 14 days: >800 mg/kg soil, <i>Eisenia fetida</i> (Earthworm) (OECD 207) No significant impact on carbon mineralization or nitrogen transformation at up to 4.0 mg/kg dry soil, Soil micrororganisms (OECD 216, 217)

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Chronic aquatic toxicity

NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.34 mg/l, <i>Daphnia magna</i> (OECD 211) NOEC, 28 days, development rate: 0.560 mg/l, <i>Chironomus riparius</i> (Sediment dwelling midge) (OECD 219) NOEC, 28 days: 0.024 mg/l, <i>Americamysis bahia</i> (Mysids)

12.2. Persistence and degradability

Ecological information on ingredients

Name	Active substance; Fenpyrazamine, technical grade
Photolysis	Water – DT ₅₀ : <2 days (EPA Sub-division N, Section 161-2)
Stability (hydrolysis)	pH 4 : stable @ 25°C pH 7 - DT ₅₀ : >1 year @ 20-25°C pH 9 - DT ₅₀ : 24 days @ 20°C pH 9 - DT ₅₀ : 11 days @ 25°C (EEC C.7)
Biodegradation	Not readily biodegradable

12.3. Bioaccumulative potential

Name	Fenpyrazamine, 500 g/kg water dispersible granules (Code ID: B10-1)
Partition coefficient	Not applicable. (Fenpyrazamine : log Pow: 3.52 @ 25°C) (OECD 107)

Ecological information on ingredients

Name	Active substance; Fenpyrazamine, technical grade
Bioaccumulative potential	BCF: exposure 28 days 283-289, <i>Lepomis macrochirus</i> (Bluegill) CT50, depuration time: <1 day, whole fish, <i>Lepomis macrochirus</i> (Bluegill) (OECD 305)
Partition coefficient	log Pow: 3.52 @ 25°C (OECD 107)

12.4. Mobility in soil

Name	Fenpyrazamine, 500 g/kg water dispersible granules (Code ID: B10-1)
Surface tension	Not applicable

Ecological information on ingredients

Name	Active substance; Fenpyrazamine, technical grade
Mobility	Highly mobile
Adsorption/desorption coefficient	Soil – Adsorption, Koc: 112-731 ml/g @ 25°C (Mean: 310 ml/g, Mean 1/n: 0.91) Soil – Desorption, Koc: 133-954 ml/g @ 25°C (Mean: 384 ml/g, Mean 1/n: 0.911) (OECD 106, January 2000)
Surface tension	66.9 mN/m @20°C (OECD 115)

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients

Name	Active substance; Fenpyrazamine, technical grade
Results of PBT and vPvB assessment	Not required (no chemical safety report required).

12.6. Other adverse effects

Ecological information on ingredients

Name	Active substance; Fenpyrazamine, technical grade
Other adverse effects	No other known adverse effects on the environment.

PROLECTUS®**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Disposal methods According to local regulations. For further advice, contact manufacturer.

SECTION 14: Transport information**14.1. UN Number**

UN No. (ADR/RID) 3077
UN No. (IMDG) 3077
UN No. (ICAO) 3077

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Fenpyrazamine)
Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Fenpyrazamine)
Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Fenpyrazamine)

14.3. Transport hazard class(es)

ADR/RID class 9
ADR/RID label 9
IMDG class 9
ICAO class/division 9

14.4. Packing group

ADR/RID packing group III
IMDG packing group III
ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

**14.6. Special precautions for user**

No other special precaution required.

EmS F-A, S-F

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code

Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code Not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU legislation There is no specific regulation/legislation for this mixture.

15.2. Chemical safety assessment

No chemical safety assessment is required for this mixture.

SECTION 16: Other information

Method for evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 used for the Classification based on; tests, properties of the active substance

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purpose of classification

Classification abbreviations and acronyms

Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)
 Eye Irrit. = Eye irritation
 Skin Irrit. = Skin irritation
 STOT SE = Specific target organ toxicity – single exposure

Abbreviations and acronyms Used in the safety data sheet

ASTM : American Society for Testing Material
 CAS: Chemical Abstracts Service.
 CFR : Code of Federal Regulations
 CLP : Classification, Labelling and Packaging
 EC : European Community
 EEC : European Economic Community
 EPA : Environmental Protection Agency (USA)
 EPPO : European and Mediterranean Plant Protection Organization
 EU : European Union
 GIFAP : International Group of National Associations of manufacturers of Agrochemical Products
 GHS: Globally Harmonized System.
 ID : identification
 i.e. : shortening of the Latin expression id est, which is translated as “that is.”
 OECD : Organisation for Economic Co-operation and Development
 PBT: Persistent, Bioaccumulative and Toxic substance.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 Regl : Regulation
 US EPA : United States Environmental Protection Agency
 vPvB: Very Persistent and Very Bioaccumulative.
 w/w : weight per weight
 FIFRA : Federal Insecticide, Fungicide and Rodenticide Act of 1972
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 LC₅₀: Lethal Concentration to 50 % of a test population.
 EC₅₀: 50% of maximal Effective Concentration.
 NOEC: No Observed Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 ECb50 : 50% of maximal Effective Concentration on biomass.
 NOECb : No Observed Effect Concentration on biomass.
 EC50fd : 50% of maximal Effective Concentration on frond density.
 NOECfd : No Observed Effect Concentration on frond density.
 DT₅₀ : degradation time for 50% of a compound
 log Pow : Octanol-water partition coefficient.
 Koc : organic carbon adsorption coefficient
 BCF: Bioconcentration Factor.
 UN: United Nations.
 No. : number
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 IMDG: International Maritime Dangerous Goods.
 ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
 N.O.S. : Not Otherwise Specified
 EmS : Emergency Response Procedures for Ships Carrying Dangerous Goods
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).
 SDS : Safety Data Sheet
 CT50 : clearance time
 ECr&b50 : 50% of maximal Effective Concentration on growth rate and biomass.
 ECr50 : 50% of maximal Effective Concentration on growth rate.
 NOECr : No Observed Effect Concentration on growth rate.
 NOECr&b : No Observed Effect Concentration on growth rate and biomass.

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Vol. = volume

CIPAC : Collaborative International Pesticides Analytical Council

USP : United States Pharmacopeia

WG: Water dispersible granules

Revision comments

Sections were modified as follows: Identity of the company/undertaking, handling and storage

Hazard statements in full

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

Reference of the SDS

Based on S218850WGB10-1EU/330gb from SCAE

This information only concerns the above mentioned product for the specific use mentioned and is not valid for such product used in combination with any other product. The information is to our best present knowledge correct and complete and is given in good faith as of the date indicated. It is the user's responsibility to use this information as appropriate for his own particular use of this product.