We create chemistry

Safety data sheet

1. Substance/preparation and manufacturer/supplier identification

Product name:
Zampro Fungicide

Use: crop protection product, fungicide

Manufacturer/supplier:
BASF Australia Limited (ABN 62 008 437 867)
Level 23, 40 City Road, Southbank
Victoria 3006, AUSTRALIA
Telephone: +61 3 8855-6600

Emergency information:
BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]
BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

2. Hazard identification

Classification of the substance and mixture:
Acute toxicity: Cat.4 (oral)
Reproductive toxicity: Cat.2 (fertility)
Reproductive toxicity: Cat.2 (unborn child)
Hazardous to the aquatic environment - acute: Cat.3
Hazardous to the aquatic environment - chronic: Cat.1

Label elements and precautionary statement:

Pictogram:



Signal Word:

Warning

Hazard Statement:

H302	Harmful if swallowed.
H361	Suspected of damaging fertility. Suspected of damaging the unborn child.
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P270	Do not eat, drink or smoke when using this product.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P391	Collect spillage.
P308 + P313	IF exposed or concerned: Get medical advice/attention.

Precautionary Statements (Storage):

P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Other hazards which do not result in classification:
If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

May produce an allergic reaction. Contains:
1,2-benzisothiazol-3(2H)-one, 2-methyl-2H-isothiazol-3-one

3. Composition/information on ingredients

Chemical nature

Substance nature: mixture

fungicide, suspension concentrate (SC)
, ametoctradin (ISO); 5-ethyl-6-octyl[1,2,4]triazolo[1,5-α]pyrimidin-7-amine (Content (W/W): 30 %)

Hazardous ingredients

Dimethomorph techn.

Content (W/W): 20.3 %	Acute Tox.: Cat. 5 (oral)
CAS Number: 110488-70-5	Repr.: Cat. 2 (fertility)
	Repr.: Cat. 2 (unborn child)
	Aquatic Acute: Cat. 2
	Aquatic Chronic: Cat. 2

4. First-Aid Measures

General advice:
First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Immediately wash thoroughly with soap and water, seek medical attention.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician:
Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far
Hazards: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:
water spray, carbon dioxide, foam, dry powder

Unsuitable extinguishing media for safety reasons:
water jet

Specific hazards:
carbon monoxide, carbon dioxide, hydrogen chloride, nitrogen oxides, halogenated compounds, silica compounds, sulfur oxides
The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Personal precautions:
Do not breathe vapour/spray.Use personal protective clothing.Avoid contact with the skin, eyes and clothing.

Environmental precautions:
Do not discharge into the subsoil/soil.Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:
For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).
For large amounts: Dike spillage. Pump off product.
Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

7. Handling and Storage

Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:
The substance/product is non-combustible. Product is not explosive. No special precautions necessary.

Storage

Segregate from foods and animal feeds.
Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Protect from temperatures below: -5 °C
The product can crystallize below the limit temperature.
Protect from temperatures above: 40 °C
Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure controls and personal protection

Components with occupational exposure limits

propane-1,2-diol, 57-55-6;
TWA value 474 mg/m3 ; 150 ppm (AU NOEL), Total vapour and particulates
TWA value 10 mg/m3 (AU NOEL), Particulate
TWA value 50 mg/m3 (AU OEL), Vapor and particulates

dimethomorph, 110488-70-5;
TWA value 0.67 mg/m3 (BASF recomm. occupational exposure limit)

ametoctradin, 865318-97-4;
TWA value 28.21 mg/m3 (BASF recomm. occupational exposure limit)

Personal protective equipment

Respiratory protection:
Respiratory protection not required.

Hand protection:
Hand protection not required.

Eye protection:
Eye protection not required.

Body protection:
Standard work clothes and shoes.

General safety and hygiene measures:
Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:	liquid	
Colour:	white	
Odour:	faintly aromatic	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
pH value:	approx. 6 - 8 (CIPAC standard water D, 1 %(m), 20 °C)	(other)
Melting point:	approx. -6.2 °C	
Boiling point:	approx. 100 °C (1,013 hPa)	
Flash point:	No flash point - Measurement made up to the boiling point.	
Flammability (solid/gas):	hardly combustible	

Lower explosion limit:		
	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Upper explosion limit:		
	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Ignition temperature:	463 °C	(Directive 92/69/EEC, A.15)
Thermal decomposition:	220 °C , 20 kJ/kg	(DSC (OECD 113))
	285 °C , 340 kJ/kg	(DSC (OECD 113))
	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
Self ignition:	Temperature: 463 °C Pressure: 994 - 1,025 hPa No self ignition was observed up to the specified temperature.	
Explosion hazard:	Based on the chemical structure there is no indication of explosive properties.	
Fire promoting properties:	not fire-propagating	
Density:	approx. 1.11 g/cm3 (approx. 20 °C)	
Solubility in water:	dispersible	
Partitioning coefficient n-octanol/water (log Pow):		
	The statements are based on the properties of the individual components.	
Information on: Dimethomorph techn.		
Partitioning coefficient n-octanol/water (log Pow):	2.63 - 2.73 (20 °C)	

Viscosity, dynamic:	approx. 81 mPa.s (20 °C, 100 1/s)	
Viscosity, kinematic:	approx. 73 mm2/s	(calculated (from dynamic viscosity))

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular form. -

10. Stability and Reactivity

Conditions to avoid:
See SDS section 7 - Handling and storage.

Thermal decomposition:	220 °C, 20 kJ/kg (DSC (OECD 113))
Thermal decomposition:	285 °C, 340 kJ/kg (DSC (OECD 113))
Thermal decomposition:	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

Substances to avoid:
strong acids, strong bases, strong oxidizing agents

Hazardous reactions:
No hazardous reactions if stored and handled as prescribed/indicated.

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

Chemical stability:
The product is stable if stored and handled as prescribed/indicated.

Reactivity:
No hazardous reactions if stored and handled as prescribed/indicated.

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:
LD50rat (oral): > 500 - < 2,000 mg/kg

Acute inhalation toxicity

LC50 rat (by inhalation): > 5.1 mg/l 4 h
An aerosol was tested.

Acute dermal toxicity

LD50 rat (dermal): > 5,000 mg/kg

Assessment of acute toxicity

Of moderate toxicity after single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Symptoms

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.
(Further) symptoms and / or effects are not known so far

Irritation

Assessment of irritating effects:
Not irritating to eyes and skin.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

Respiratory/Skin sensitization

Assessment of sensitization:
No sensitizing effect.

Experimental/calculated data:
Buehler test guinea pig: Non-sensitizing.

Mouse Local Lymph Node Assay (LLNA) mouse: Non-sensitizing.

Germ cell mutagenicity

Assessment of mutagenicity:
Mutagenicity tests revealed no genotoxic potential. The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity

Assessment of carcinogenicity:
The results of various animal studies gave no indication of a carcinogenic effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Reproductive toxicity

Assessment of reproduction toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dimethomorph (ISO); 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine
Assessment of reproduction toxicity:
The results of animal studies suggest a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dimethomorph (ISO); 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine
Assessment of teratogenicity:
Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Specific target organ toxicity (single exposure)

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dimethomorph (ISO); 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine
Assessment of repeated dose toxicity:
The substance may cause damage to the prostate after repeated ingestion. Based on available data, the classification criteria are not met.

Aspiration hazard

not applicable

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:
Harmful to aquatic life. Very toxic to aquatic life with long lasting effects.

Toxicity to fish:
LC50 (96 h) 23.2 mg/l, Oncorhynchus mykiss (static)

Aquatic invertebrates:
EC50 (48 h) > 100 mg/l, Daphnia magna

Aquatic plants:
EC50 (72 h) 74.2 mg/l (growth rate), Pseudokirchneriella subcapitata

Information on: dimethomorph (ISO); 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine
Chronic toxicity to fish:
EC10 (60 d) 0.116 mg/l, Oncorhynchus mykiss

No observed effect concentration (34 d) 0.107 mg/l, Pimephales promelas
---

Information on: ametoctradin (ISO); 5-ethyl-6-octyl[1,2,4]triazolo[1,5-α]pyrimidin-7-amine
Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), 0.044 mg/l, Daphnia magna (OECD Guideline 211, semistatic)

Information on: dimethomorph (ISO); 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine
Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), 0.22 mg/l, Daphnia magna

EC10 (21 d), 0.421 mg/l, Daphnia magna

Mobility

Assessment transport between environmental compartments:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: ametoctradin (ISO); 5-ethyl-6-octyl[1,2,4]triazolo[1,5-α]pyrimidin-7-amine
Assessment transport between environmental compartments:
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Information on: dimethomorph (ISO); 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine
Assessment transport between environmental compartments:
The substance will not evaporate into the atmosphere from the water surface.
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Persistence and degradability

Assessment biodegradation and elimination (H2O):
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: ametoctradin (ISO); 5-ethyl-6-octyl[1,2,4]triazolo[1,5-α]pyrimidin-7-amine
Assessment biodegradation and elimination (H2O):
According to OECD criteria the product is not readily biodegradable but inherently biodegradable.

Information on: dimethomorph (ISO); 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine
Assessment biodegradation and elimination (H2O):
Not readily biodegradable (by OECD criteria).

Bioaccumulation potential

Assessment bioaccumulation potential:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dimethomorph (ISO); 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine
Assessment bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Information on: ametoctradin (ISO); 5-ethyl-6-octyl[1,2,4]triazolo[1,5-α]pyrimidin-7-amine
Bioaccumulation potential:
Bioconcentration factor: 197 - 202, Lepomis macrochirus
Accumulation in organisms is not to be expected.

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal Considerations

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Domestic transport:

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (AMETOCTRADIN, DIMETHOMORPH)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Further information
Hazchem Code:3Z
IERG Number:47

Sea transport
IMDG

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (AMETOCTRADIN, DIMETHOMORPH)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes Marine pollutant: YES
Special precautions for user:	EmS: F-A; S-F

Air transport
IATA/ICAO

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (AMETOCTRADIN, DIMETHOMORPH)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information
Environmentally Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subjected to the Australian Dangerous Goods Code when transported by road or rail in packagings not exceeding 500 kg(L) or IBCs.

Further information
Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 5

APVMA Approval No: 63651

Registration status:

AICIS, AU

Contains non-registered, non-listed substance., Individual registration may be required., Please contact your BASF representative.

16. Other Information

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.