We create chemistry

# Safety data sheet



## 1. Substance/preparation and manufacturer/supplier identification

**Product name:**
Efficon Insecticide

Use: crop protection product, insecticide

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:
Hazardous to the aquatic environment - acute: Cat.3
Hazardous to the aquatic environment - chronic: Cat.3

Label elements and precautionary statement:

Hazard Statement:

| | |
|---|---|
| H402 | Harmful to aquatic life. |
| H412 | Harmful 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 (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.

## 3. Composition/information on ingredients

Chemical nature

Substance nature: mixture

crop protection product, insecticide, Soluble concentrate (SL)

**Hazardous ingredients**

1-(1,2-Dimethylpropyl)-N-ethyl-5-methyl-N-4-pyridazinyl-1H-pyrazole-4-carboxamide

| | |
|---|---|
| Content (W/W): 10.79 % | Acute Tox.: Cat. 4 (oral) |
| CAS Number: 1403615-77-9 | Aquatic Acute: Cat. 3 |

propylene carbonate

| | |
|---|---|
| Content (W/W): < 20 % | Eye Irrit.: Cat. 2A |
| CAS Number: 108-32-7 | |

Oxirane, methyl-, polymer with oxirane

| | |
|---|---|
| Content (W/W): < 5 % | Acute Tox.: Cat. 5 (oral) |
| CAS Number: 9003-11-6 | Skin Corr./Irrit.: Cat. 3 |

Poly(oxy-1,2-ethanediyl), .alpha.-[2,4,6-tris(1-phenylethyl)phenyl]-.omega.-hydroxy-

| | |
|---|---|
| Content (W/W): < 5 % | Aquatic Acute: Cat. 2 |
| CAS Number: 70559-25-0 | Aquatic Chronic: Cat. 2 |

cyclohexanone

| | |
|---|---|
| Content (W/W): < 5 % | Flam. Liq.: Cat. 3 |
| CAS Number: 108-94-1 | Acute Tox.: Cat. 4 (Inhalation - vapour) |
| | Acute Tox.: Cat. 4 (oral) |
| | Acute Tox.: Cat. 4 (dermal) |
| | Skin Irrit.: Cat. 2 |
| | Eye Dam.: Cat. 1 |
| | STOT SE: Cat. 3 (drowsiness and dizziness) |
| | Aquatic Acute: Cat. 3 |

Alcohols, C12-18, ethoxylated propoxylated

| | |
|---|---|
| Content (W/W): < 5 % | Aquatic Acute: Cat. 2 |
| CAS Number: 69227-21-0 | |

polyethylene glycol
Content (W/W): < 50 %
CAS Number: 25322-68-3

propane-1,2-diol
Content (W/W): < 20 %
CAS Number: 57-55-6

## 4. First-Aid Measures

General advice:
Remove contaminated clothing.

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

On skin contact:
Wash thoroughly with soap and water

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

On ingestion:
Rinse mouth and then drink 200-300 ml of water.

Note to physician:
Symptoms: (Further) symptoms and / or effects are not known so far
Hazards: (Further) symptoms and / or effects are not known so far
Treatment: Symptomatic treatment (decontamination, vital functions).

## 5. Fire-Fighting Measures

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

Specific hazards:
carbon monoxide, carbon dioxide, hydrogen chloride, nitrogen oxides, halogenated compounds, sulfur oxides, potassium oxides, sodium 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:
Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. 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.

## 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:
Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Storage

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

Storage stability:
Storage duration: 36 Months

Protect from temperatures below: -10 °C
Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.
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

cyclohexanone, 108-94-1;
TWA value 20 ppm (ACGIHTLV)
STEL value 50 ppm (ACGIHTLV)
Skin Designation (AU NOEL)
The substance can be absorbed through the skin.
TWA value 100 mg/m3 ; 25 ppm (AU NOEL)
Skin Designation (ACGIHTLV)
Danger of cutaneous absorption
Skin Designation (ACGIHTLV)
Danger of cutaneous absorption
Skin Designation (AU OEL)
The substance can be absorbed through the skin.
TWA value 40 mg/m3 ; 10 ppm (AU OEL)
STEL value 80 mg/m3 ; 20 ppm (AU OEL)

Personal protective equipment

Respiratory protection:
Respiratory protection not required.

Hand protection:
Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:
The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. 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: | dark brown |
| Odour: | flowery |
| Odour threshold: | Not determined due to potential health hazard by inhalation. |
| pH value: | approx. 4 - 6<br>(1 %(m)) |

Melting point:
The product has not been tested.

Boiling point:
The product has not been tested.

Flash point: 94 °C

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: approx. 400 °C

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

Vapour pressure:
The product has not been tested.

Density: approx. 1.11 g/cm3
(20 °C)

Relative vapour density (air):
not determined

Solubility in water: dispersible

Partitioning coefficient n-octanol/water (log Pow):
The statements are based on the properties of the individual components.

Information on: 1-(1,2-Dimethylpropyl)-N-ethyl-5-methyl-N-4-pyridazinyl-1H-pyrazole-4-carboxamide

Partitioning coefficient n-octanol/water (log Pow): approx. 1.1
(20 °C; pH value: 6)

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Viscosity, dynamic: approx. 71 mPa.s
(20 °C, 100 1/s)

Viscosity, kinematic: approx. 64 mm2/s (calculated (from dynamic viscosity))
(20 °C)

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

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): > 2,000 mg/kg (OECD Guideline 423)
No mortality was observed.

**Acute inhalation toxicity**

LC50 rat (by inhalation): > 5.108 mg/l (OECD Guideline 403)
An aerosol was tested.

**Acute dermal toxicity**

LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)
No mortality was observed.

**Assessment of acute toxicity**

Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. Virtually nontoxic after a single ingestion.

**Symptoms**

(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 (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

### Respiratory/Skin sensitization

Assessment of sensitization:
No sensitizing effect.

Experimental/calculated data:
Mouse Local Lymph Node Assay (LLNA) mouse: Non-sensitizing. (OECD Guideline 429)

### Germ cell mutagenicity

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

Information on: Oxirane, methyl-, polymer with oxirane
Assessment of mutagenicity:
The substance was mutagenic in a bacterial test system. Inconclusive data. As the significance of these findings for human health is not clear at this time, further tests are being initiated. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
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### Carcinogenicity

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

Information on: cyclohexanone
Assessment of carcinogenicity:
In long-term animal studies in which the substance was given in the drinking water in high doses, a carcinogenic effect was observed. Due to the rat-specific mode of action, no carcinogenic effects are expected in man. Hence, the findings are of low relevance for humans. IARC Group 3 (not classifiable as to human carcinogenicity).
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### Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from the properties of the individual components.

### 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: cyclohexanone
Assessment of teratogenicity:
The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.
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### 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: propylene carbonate
Assessment of repeated dose toxicity:
Repeated oral uptake of the substance did not cause substance-related effects. No adverse effects were observed after repeated inhalative exposure in animal studies. After repeated exposure the prominent effect is local irritation.

Information on: 1-(1,2-Dimethylpropyl)-N-ethyl-5-methyl-N-4-pyridazinyl-1H-pyrazole-4-carboxamide
Assessment of repeated dose toxicity:
Repeated exposure to large quantities may affect certain organs. Based on available data, the classification criteria are not met.
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### 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 with long lasting effects.

Toxicity to fish:

LC50 (96 h) 21.8 mg/l, Oncorhynchus mykiss

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

Aquatic plants:
EC50 (72 h) > 100 mg/l (growth rate), Pseudokirchneriella subcapitata

EC10 (72 h) 41.1 mg/l (growth rate), Pseudokirchneriella subcapitata

Information on: 1-(1,2-Dimethylpropyl)-N-ethyl-5-methyl-N-4-pyridazinyl-1H-pyrazole-4-carboxamide
Chronic toxicity to fish:
No observed effect concentration >= 10.7 mg/l, Oncorhynchus mykiss
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Information on: 1-(1,2-Dimethylpropyl)-N-ethyl-5-methyl-N-4-pyridazinyl-1H-pyrazole-4-carboxamide
Chronic toxicity to aquatic invertebrates:
No observed effect concentration, >= 2 mg/l, Daphnia magna
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## 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: 1-(1,2-Dimethylpropyl)-N-ethyl-5-methyl-N-4-pyridazinyl-1H-pyrazole-4-carboxamide
Assessment transport between environmental compartments:
Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.
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## 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: 1-(1,2-Dimethylpropyl)-N-ethyl-5-methyl-N-4-pyridazinyl-1H-pyrazole-4-carboxamide
Assessment biodegradation and elimination (H2O):
Not readily biodegradable (by OECD criteria).
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## 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: 1-(1,2-Dimethylpropyl)-N-ethyl-5-methyl-N-4-pyridazinyl-1H-pyrazole-4-carboxamide
Assessment bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.
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### 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:**

| | |
|---|---|
| | Not classified as a dangerous good under transport regulations |
| UN number or ID number | Not applicable |
| UN proper shipping name: | Not applicable |
| Transport hazard class(es): | Not applicable |
| Packing group: | Not applicable |
| Environmental hazards: | Not applicable |
| Special precautions for user | None known |

**Sea transport**
IMDG

| | |
|---|---|
| | Not classified as a dangerous good under transport regulations |
| UN number or ID number: | Not applicable |
| UN proper shipping name: | Not applicable |
| Transport hazard class(es): | Not applicable |
| Packing group: | Not applicable |
| Environmental hazards: | Not applicable<br>Marine pollutant: no |
| Special precautions for user | None known |

**Air transport**
IATA/ICAO

| | |
|---|---|
| | Not classified as a dangerous good under transport regulations |
| UN number or ID number | Not applicable |
| Proper shipping name: | Not applicable |
| Transport hazard class(es): | Not applicable |
| Packing group: | Not applicable |
| Environmental hazards: | Not applicable |
| Special precautions for user | None known |

### Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

## 15. Regulatory Information

**Other regulations**

To avoid risks to man and the environment, comply with the instructions for use.

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

APVMA Approval No: 90474

**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.