

# Safety data sheet

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BASF Safety data sheet  
Date / Revised: 12.10.2016  
Product: **OPERA FUNGICIDE**

Version: 5.0

(30504135/SDS\_CPA\_AU/EN)

Date of print 13.10.2016

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

### OPERA FUNGICIDE

Use: crop protection product, fungicide

Manufacturer/supplier:

BASF Australia Limited (ABN 62 008 437 867)  
Level 12, 28 Freshwater Place Southbank  
Victoria 3006, AUSTRALIA  
Telephone: +61 3 8855-6600  
Telefax number: +61 3 8855-6511

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)  
Acute toxicity: Cat. 4 (Inhalation - mist)  
Skin corrosion/irritation: Cat. 2  
Skin sensitization: Cat. 1  
Carcinogenicity: Cat. 2  
Reproductive toxicity: Cat. 2 (fertility)  
Reproductive toxicity: Cat. 2 (unborn child)  
Hazardous to the aquatic environment - acute: Cat. 1  
Hazardous to the aquatic environment - chronic: Cat. 1

Label elements and precautionary statement:

Pictogram:



Signal Word:  
Warning

Hazard Statement:

Causes skin irritation. Harmful if inhaled. Harmful if swallowed. May cause an allergic skin reaction. Suspected of causing cancer. Suspected of damaging fertility. Suspected of damaging the unborn child. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

Wear protective gloves/clothing. Use only outdoors or in a well-ventilated area. Do not breathe mist or vapour. Do not handle until all safety precautions have been read and understood. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

IF exposed or concerned: Call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Wash with plenty of soap and water. If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician. IF SWALLOWED: rinse mouth. Collect spillage. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

Store locked up.

Precautionary Statements (Disposal):

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

Other hazards which do not result in classification:

See section 12 - Results of PBT and vPvB assessment.

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.

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### 3. Composition/information on ingredients

#### Chemical nature

crop protection product, fungicide, Suspo-emulsion (SE)

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Hazardous ingredients

## Pyraclostrobin

Content (W/W): 8.2 %  
 CAS Number: 175013-18-0

Acute Tox.: Cat. 3 (Inhalation - mist)  
 Skin Corr./Irrit.: Cat. 2  
 STOT SE: Cat. 3 (irr. to respiratory syst.)  
 Aquatic Acute: Cat. 1  
 Aquatic Chronic: Cat. 1  
 M-factor acute: 100  
 M-factor chronic: 100

## Epoxiconazole

Content (W/W): 6 %  
 CAS Number: 133855-98-8

Acute Tox.: Cat. 5 (oral)  
 Carc.: Cat. 2  
 Repr.: Cat. 2 (fertility)  
 Repr.: Cat. 2 (unborn child)  
 Aquatic Acute: Cat. 1  
 Aquatic Chronic: Cat. 1

## solvent naphtha

Content (W/W): < 20 %  
 CAS Number: 64742-94-5

Asp. Tox.: Cat. 1  
 Aquatic Acute: Cat. 2  
 Aquatic Chronic: Cat. 2

## Oxirane, methyl-, polymer with oxirane, monoisotridecyl ether, block

Content (W/W): < 10 %

Skin Corr./Irrit.: Cat. 3  
 Eye Dam./Irrit.: Cat. 2A  
 Aquatic Acute: Cat. 2

## naphthalene

Content (W/W): < 0.1 %  
 CAS Number: 91-20-3

Acute Tox.: Cat. 4 (oral)  
 Carc.: Cat. 2  
 Aquatic Acute: Cat. 1  
 Aquatic Chronic: Cat. 1  
 M-factor acute: 1  
 M-factor chronic: 1

## 1,2-benzisothiazol-3(2H)-one

Content (W/W): < 0.05 %  
 CAS Number: 2634-33-5

Acute Tox.: Cat. 4 (oral)  
 Skin Corr./Irrit.: Cat. 2  
 Eye Dam./Irrit.: Cat. 1  
 Skin Sens.: Cat. 1  
 Aquatic Acute: Cat. 1  
 M-factor acute: 10

## 4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

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

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, consult an eye specialist.

On ingestion:

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

Note to physician:

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

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 fluoride, hydrogen chloride, nitrogen oxides, organochloric compounds

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.

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## 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. Remove contaminated clothing and protective equipment before entering eating areas.

**Protection against fire and explosion:**

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

### Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight. Store protected against freezing.

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## 8. Exposure controls and personal protection

### Components with occupational exposure limits

naphthalene, 91-20-3;

TWA value 10 ppm (ACGIHTLV)

STEL value 15 ppm (ACGIHTLV)

Skin Designation (ACGIHTLV)

The substance can be absorbed through the skin.

TWA value 52 mg/m<sup>3</sup> ; 10 ppm (OEL (AU))

STEL value 79 mg/m<sup>3</sup> ; 15 ppm (OEL (AU))

STEL value 79 mg/m<sup>3</sup> ; 15 ppm (AU NOEL)

TWA value 52 mg/m<sup>3</sup> ; 10 ppm (AU NOEL)

Epoxiconazole, 133855-98-8;

TWA value 0.3 mg/m<sup>3</sup> (Recommendation of BASF), Respirable dust

### Personal protective equipment

#### Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e. g. EN 14387 Type ABEK-P3)

#### Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): 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.

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## 9. Physical and Chemical Properties

Form:	suspension	
Colour:	off-white	
Odour:	moderate odour, aromatic	
Odour threshold:	Not determined since harmful by inhalation.	
pH value:	approx. 5.5 - 7.5 (20 °C) (measured with the undiluted substance)	(pH Meter)
Freezing point:	-1.3 °C	(measured)
boiling temperature:	approx. 100 °C Information applies to the solvent.	(measured)
Flash point:	No flash point - Measurement made up to the boiling point.	(Directive 92/69/EEC, A.9)
Evaporation rate:	not applicable	
Flammability (solid/gas):	not highly flammable	

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:	475 °C	(Directive 92/69/EEC, A.15)
Thermal decomposition:	155 °C , 30 kJ/kg	(DSC (OECD 113))
	365 °C , 260 kJ/kg	(DSC (OECD 113))
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	(UN Test O.2 (oxidizing liquids))
Vapour pressure:	approx. 23 mbar (20 °C) Information applies to the solvent.	
Relative density:	approx. 1.04 (20 °C)	(calculated)
Relative vapour density (air):	not applicable	
Solubility in water:	dispersible	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
Viscosity, dynamic:	approx. 27 mPa.s (40 °C, 100 1/s)	(OECD 114)
Viscosity, kinematic:	approx. 26 mm <sup>2</sup> /s (40 °C)	

## Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

## 10. Stability and Reactivity

## Conditions to avoid:

See MSDS section 7 - Handling and storage.

Thermal decomposition: 155 °C, 30 kJ/kg (DSC (OECD 113))

Thermal decomposition: 365 °C, 260 kJ/kg (DSC (OECD 113))

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

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.

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## 11. Toxicological Information

### Acute toxicity

Assessment of acute toxicity:  
Of moderate toxicity after single ingestion. Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:  
LD50 rat (oral): > 300 - < 500 mg/kg (OECD Guideline 423)

LC50 rat (by inhalation): 3.22 mg/l 4 h  
An aerosol was tested.

LD50 rat (dermal): > 4,000 mg/kg

### Irritation

Assessment of irritating effects:  
Skin contact causes irritation. Not irritating to the eyes.

Experimental/calculated data:  
Skin corrosion/irritation rabbit:

Serious eye damage/irritation rabbit: non-irritant

### Respiratory/Skin sensitization

Assessment of sensitization:  
Sensitization after skin contact possible.

Experimental/calculated data:  
modified Buehler test guinea pig:

### Germ cell mutagenicity

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

### Carcinogenicity

Assessment of carcinogenicity:



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

Information on: Epoxiconazole  
Assessment of carcinogenicity:  
Indication of possible carcinogenic effect in animal tests.  
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### **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: Epoxiconazole  
Assessment of reproduction toxicity:  
The results of animal studies suggest a fertility impairing effect.  
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### **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: Epoxiconazole  
Assessment of teratogenicity:  
Indications of possible developmental toxicity/teratogenicity were seen in animal studies.  
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### **Specific target organ toxicity (single exposure):**

Assessment of STOT single:  
| The available information is not sufficient for the evaluation of specific target organ toxicity.

### **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: Epoxiconazole  
Assessment of repeated dose toxicity:  
Repeated exposure to large quantities may affect certain organs.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-ylloxymethyl]phenyl}(N-methoxy)carbamate  
Assessment of repeated dose toxicity:  
After repeated exposure the prominent effect is local irritation. The substance may cause damage to the olfactory epithelium after repeated inhalation.  
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### **Aspiration hazard**

No aspiration hazard expected.  
The product has not been tested. The statement has been derived from the properties of the individual components.

### Other relevant toxicity information

Misuse can be harmful to health.

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## 12. Ecological Information

### Ecotoxicity

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

Toxicity to fish:  
LC50 (96 h) 0.074 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:  
EC50 (48 h) 0.14 mg/l, *Daphnia magna*

Aquatic plants:  
EC50 (72 h) 5.05 mg/l (growth rate), *Pseudokirchneriella subcapitata*

EC10 (72 h) 0.07 mg/l (growth rate), *Pseudokirchneriella subcapitata*

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Chronic toxicity to fish:

No observed effect concentration (98 d) approx. 0.00235 mg/l, *Oncorhynchus mykiss* (OECD Guideline 210, Flow through.)  
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Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d), 0.004 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: Epoxiconazole

Assessment transport between environmental compartments:

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

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Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Assessment transport between environmental compartments:

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

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### **Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):

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

Information on: Epoxiconazole

Assessment biodegradation and elimination (H<sub>2</sub>O):

Not readily biodegradable (by OECD criteria).

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

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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: Epoxiconazole

Bioaccumulation potential:

Bioconcentration factor: 59 - 70, *Oncorhynchus mykiss* (OECD-Guideline 305)

Does not accumulate in organisms.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Bioaccumulation potential:

Bioconcentration factor: 379 - 507, *Oncorhynchus mykiss* (OECD-Guideline 305)

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.

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## **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.

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## 14. Transport Information

### Domestic transport:

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains EPOXICONAZOLE, PYRACLOSTROBIN,  
SOLVENT NAPHTHA)

### Further information

Hazchem Code:3Z  
IERG Number:47

### Sea transport

#### IMDG

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Marine pollutant: YES  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains EPOXICONAZOLE, PYRACLOSTROBIN,  
SOLVENT NAPHTHA)

### Air transport

#### IATA/ICAO

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains EPOXICONAZOLE, PYRACLOSTROBIN,  
SOLVENT NAPHTHA)

### 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.

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## 15. Regulatory Information

### Other regulations

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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

**Registration status:**

AICS, AU released / exempt  
APVMA Approval 62753

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## 16. Other Information

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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.