

# Safety data sheet

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BASF Safety data sheet

Date / Revised: 12.10.2016

Product: **SYSTIVA SEED TREATMENT FUNGICIDE**

Version: 3.0

(30645102/SDS\_CPA\_AU/EN)

Date of print 13.10.2016

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

### SYSTIVA SEED TREATMENT 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:

Carcinogenicity: Cat. 2

Hazardous to the aquatic environment - acute: Cat. 2

Hazardous to the aquatic environment - chronic: Cat. 1

Label elements and precautionary statement:

Pictogram:



Signal Word:

Warning

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**Hazard Statement:**

Suspected of causing cancer. Toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

**Precautionary Statements (Prevention):**

Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

**Precautionary Statements (Response):**

IF exposed or concerned: Call a POISON CENTER or doctor/physician. Collect spillage.

**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, Flowable concentrate for seed treatment ( FS )

**Hazardous ingredients**

fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide

Content (W/W): 28.7 %  
CAS Number: 907204-31-3

Carc.: Cat. 2  
Aquatic Acute: Cat. 1  
Aquatic Chronic: Cat. 1

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### 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.

**On ingestion:**

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

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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.

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## 5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, carbon dioxide, foam, dry powder

Specific hazards:

carbon monoxide, carbon dioxide, hydrogen fluoride, nitrogen 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:

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. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

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## 6. Accidental Release Measures

Personal precautions:

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

Environmental precautions:

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

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.

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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.

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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.

Protect from temperatures below: 0 °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.

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## 8. Exposure controls and personal protection

### Components with occupational exposure limits

No occupational exposure limits known.

### Personal protective equipment

Respiratory protection:

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

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: red

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Odour:	faintly aromatic	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
pH value:	approx. 6 - 7 (water, 1 %(m), approx. 20 °C)	(other)
solidification temperature:	approx. -4.3 °C	
Boiling point:	100 °C	(measured)
Flash point:	100 °C 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	(Directive 92/69/EEC, A.12)
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. 449 °C	(Directive 92/69/EEC, A.15)
Thermal decomposition:	145 °C , 40 kJ/kg	(DSC (OECD 113))
	295 °C , 160 kJ/kg	(DSC (OECD 113))
	410 °C , 30 kJ/kg	(DSC (OECD 113))
Explosion hazard:	not explosive	(Directive 92/69/EEC, A.14)
Fire promoting properties:	not fire-propagating	(Directive 2004/73/EC, A.21)
Vapour pressure:	approx. 23 hPa (approx. 20 °C) Information applies to the solvent.	
Density:	approx. 1.16 g/cm <sup>3</sup> (20 °C)	
Relative density:	approx. 1.16 (20 °C)	
Relative vapour density (air):	not applicable	
Solubility in water:	dispersible	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	

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Viscosity, dynamic: 18 mPa.s (OECD 114)  
(40 °C)

**Other Information:**

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

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## 10. Stability and Reactivity

**Conditions to avoid:**

See MSDS section 7 - Handling and storage.

Thermal decomposition: 145 °C, 40 kJ/kg (DSC (OECD 113))

Thermal decomposition: 295 °C, 160 kJ/kg (DSC (OECD 113))

Thermal decomposition: 410 °C, 30 kJ/kg (DSC (OECD 113))

**Substances to avoid:**

strong acids, strong bases, strong oxidizing agents

Corrosion to metals: Corrosive effects to metal are not anticipated.

**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:**

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

**Experimental/calculated data:**

LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)

No mortality was observed.

LC50 rat (by inhalation): > 5.2 mg/l 4 h (OECD Guideline 403)

An aerosol was tested.

LD50 rat (dermal): > 5,000 mg/kg (OECD Guideline 402)

No mortality was observed.

### Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:  
Skin corrosion/irritation rabbit: (OECD Guideline 404)

Serious eye damage/irritation rabbit: (OECD Guideline 405)  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### **Respiratory/Skin sensitization**

Assessment of sensitization:  
There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:  
Mouse Local Lymph Node Assay (LLNA) mouse: (OECD Guideline 429)  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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

Information on: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide  
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. The results of animal studies gave no indication of 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. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

The product contains: 1,2-benzisothiazol-3(2H)-one  
May produce an allergic reaction.

### **Specific target organ toxicity (single exposure):**

Assessment of STOT single:

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: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide

Assessment of repeated dose toxicity:

Adaptive effects were observed after repeated exposure in animal studies.

### **Aspiration hazard**

No aspiration hazard expected.

### **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 organisms. May cause long-term adverse effects in the aquatic environment.

Toxicity to fish:

LC50 (96 h) 1.46 mg/l, *Oncorhynchus mykiss* (OECD 203; ISO 7346; 92/69/EEC, C.1)

Aquatic invertebrates:

EC50 (48 h) 45.29 mg/l, *Daphnia magna* (OECD Guideline 202, part 1)

Aquatic plants:

EC50 (72 h) 2.49 mg/l, *Pseudokirchneriella subcapitata* (OECD Guideline 201)

EC10 (72 h) 1.62 mg/l, *Pseudokirchneriella subcapitata*

Information on: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide

Chronic toxicity to fish:

No observed effect concentration (33 d) 0.0359 mg/l, *Pimephales promelas* (OECD Guideline 210, Flow through.)



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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: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide

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: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide

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

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: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide

Assessment bioaccumulation potential:

Does not accumulate in organisms.

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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, EHS  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains FLUXAPYROXAD)

### Further information

Hazchem Code:3Z  
IERG Number:47

### Sea transport

#### IMDG

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

### Air transport

#### IATA/ICAO

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHS  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains FLUXAPYROXAD)

### 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

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

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

**Registration status:**

AICS, AU released w/o restriction f. BASF / not listed  
APVMA Approval 70065

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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.