

# Safety data sheet

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BASF Safety data sheet  
Date / Revised: 21.06.2022  
Product: **Cosmos® Insecticidal Seed Treatment**

Version: 4.0

(30488894/SDS\_CPA\_AU/EN)

Date of print): 14.03.2023

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

### Product name:

**Cosmos® Insecticidal Seed Treatment**

Use: crop protection product, insecticide

#### 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.3 (oral)

Acute toxicity: Cat.3 (Inhalation - mist)

Specific target organ toxicity — repeated exposure: Cat.1

Hazardous to the aquatic environment - acute: Cat.1

Hazardous to the aquatic environment - chronic: Cat.1

Label elements and precautionary statement:

Pictogram:



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Signal Word:  
Danger

## Hazard Statement:

H372 Causes damage to organs through prolonged or repeated exposure.  
H301 + H331 Toxic if swallowed or if inhaled  
H400 Very toxic 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):

P271 Use only outdoors or in a well-ventilated area.  
P260 Do not breathe mist.  
P270 Do not eat, drink or smoke when using this product.  
P264 Wash contaminated body parts thoroughly after handling.

## Precautionary Statements (Response):

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P311 Call a POISON CENTER or physician.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or physician.  
P330 Rinse mouth  
P391 Collect spillage.

## Precautionary Statements (Storage):

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
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:

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.

| May produce an allergic reaction. Contains: 2-METHYL-2H-ISOTHIAZOL-3-ONE

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### 3. Composition/information on ingredients

#### Chemical nature

Substance nature: mixture

crop protection product, insecticide, Flowable concentrate for seed treatment ( FS )

#### Hazardous ingredients

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## Fipronil

Content (W/W): 40.1 %  
 CAS Number: 120068-37-3

Acute Tox.: Cat. 2 (Inhalation - dust)  
 Acute Tox.: Cat. 3 (oral)  
 Acute Tox.: Cat. 3 (dermal)  
 STOT RE (Central nervous system): Cat. 1  
 Aquatic Acute: Cat. 1  
 Aquatic Chronic: Cat. 1  
 M-factor acute: 1000  
 M-factor chronic: 10000

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts

Content (W/W): < 3 %  
 CAS Number: 68425-94-5

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

2-methyl-2H-isothiazol-3-one

Content (W/W): < 0.05 %  
 CAS Number: 2682-20-4

Acute Tox.: Cat. 2 (Inhalation - dust)  
 Acute Tox.: Cat. 3 (oral)  
 Acute Tox.: Cat. 3 (dermal)  
 Skin Corr./Irrit.: Cat. 1B  
 Eye Dam./Irrit.: Cat. 1  
 Skin Sens.: Cat. 1A  
 Aquatic Acute: Cat. 1  
 Aquatic Chronic: Cat. 1  
 M-factor acute: 10  
 M-factor chronic: 1

propane-1,2-diol

Content (W/W): < 10 %  
 CAS Number: 57-55-6

## Fipronil

Content (W/W): 40 %  
 CAS Number: 120068-37-3

Acute Tox.: Cat. 2 (Inhalation - dust)  
 Acute Tox.: Cat. 3 (oral)  
 Acute Tox.: Cat. 3 (dermal)  
 STOT RE (Central nervous system): Cat. 1  
 Aquatic Acute: Cat. 1  
 Aquatic Chronic: Cat. 1  
 M-factor acute: 1000  
 M-factor chronic: 10000

#### 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.

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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: convulsions, tremors, excitation

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, foam, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

Specific hazards:

carbon monoxide, hydrogen chloride, hydrogen fluoride, carbon dioxide, nitrogen oxides, sulfur 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:

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:

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

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

propane-1,2-diol, 57-55-6;

TWA value 474 mg/m<sup>3</sup> ; 150 ppm (AU NOEL), Total vapour and particulates

TWA value 10 mg/m<sup>3</sup> (AU NOEL), Particulate

TWA value 474 mg/m<sup>3</sup> ; 150 ppm (OEL (AU)), Total vapour and particulates

TWA value 10 mg/m<sup>3</sup> (OEL (AU)), Particulate

### 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)

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**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.

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## 9. Physical and Chemical Properties

Form: liquid  
 Colour: red  
 Odour: moderate odour, aromatic  
 Odour threshold: Not determined since toxic by inhalation.

pH value: approx. 6 - 8  
 (CIPAC standard water D, 23 °C)

Melting point: approx. -4.3 °C  
 Boiling point: approx. 100 °C  
 Information based on the main component/s.

Flash point: (Directive 92/69/EEC, A.9)  
 Non-flammable.

Evaporation rate:  
 not applicable

Flammability (solid/gas): not applicable  
 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.

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Ignition temperature: > 600 °C (DIN 51794)

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

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating (Directive 2004/73/EC, A.21)

Vapour pressure: The product has not been tested.

Density: approx. 1.25 g/cm<sup>3</sup> (20 °C)  
approx. 1.25 g/cm<sup>3</sup> (15 °C)  
approx. 1.23 g/cm<sup>3</sup> (50 °C)

Relative vapour density (air): not applicable

Solubility in water: dispersible

Partitioning coefficient n-octanol/water (log Pow): not applicable

Viscosity, dynamic: approx. 49 mPa.s (20 °C, 100 1/s)

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 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.

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## 11. Toxicological Information

### Routes of exposure

### **Acute oral toxicity**

Experimental/calculated data:

LD50rat (oral): 268 mg/kg

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### **Acute inhalation toxicity**

LC50 rat (by inhalation): 0.9 mg/l 4 h

An aerosol was tested.

### **Acute dermal toxicity**

LD50 rat (dermal): > 2,000 mg/kg

No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### **Assessment of acute toxicity**

Of pronounced toxicity after single ingestion. Of pronounced toxicity after short-term inhalation. Virtually nontoxic after a single skin contact.

### **Symptoms**

convulsions tremors excitation

### **Irritation**

Assessment of irritating effects:

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

Experimental/calculated data:

Skin corrosion/irritation rabbit:

The statement for skin irritation was derived from products of similar composition.

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

### **Respiratory/Skin sensitization**

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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:

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



Information on: Fipronil

Assessment of carcinogenicity:

In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

### **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.

### **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: Fipronil

Assessment of repeated dose toxicity:

Causes mortality and signs of neurotoxicity through prolonged or repeated exposure.

### **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 life with long lasting effects.  
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fipronil  
Toxicity to fish:  
LC50 (96 h) 0.0852 mg/l, *Lepomis macrochirus* (OPP 72-1 (EPA-Guideline), Flow through.)  
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Information on: Fipronil  
Aquatic invertebrates:  
EC50 (48 h) 0.00024 mg/l, *Chironomus riparius* (OECD 235, static)  
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Information on: Fipronil  
Aquatic plants:  
EC50 (96 h) 0.068 mg/l (growth rate), *Scenedesmus subspicatus* (OECD Guideline 201, static)  
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No observed effect concentration (96 h) 0.040 mg/l (growth rate), *Scenedesmus subspicatus* (OECD Guideline 201, static)  
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Information on: Fipronil  
Chronic toxicity to fish:  
No observed effect concentration (35 d) 0.0029 mg/l, *Cyprinodon variegatus*  
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Information on: Fipronil  
Chronic toxicity to aquatic invertebrates:  
No observed effect concentration (28 d), 0.000008 mg/l, *Mysidopsis bahia*  
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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: Fipronil  
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: Fipronil  
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: Fipronil

Bioaccumulation potential:

Bioconcentration factor: 321, *Lepomis macrochirus*

Accumulation in organisms is not to be expected.

### 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:

UN number or ID number: UN 2902

UN proper shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S. (FIPRONIL)

Transport hazard class(es): 6.1, EHSM

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

### Further information

Hazchem Code:2X

IERG Number:34

### Sea transport

IMDG

UN number or ID number: UN 2902

UN proper shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S. (FIPRONIL)

Transport hazard class(es): 6.1, EHSM

Packing group: III

Environmental hazards: yes

Marine pollutant: YES

Special precautions for user: EmS: F-A; S-A

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user:

**Air transport**

IATA/ICAO

UN number or ID number: UN 2902  
UN proper shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S. (FIPRONIL)  
Transport hazard class(es): 6.1  
Packing group: III  
Environmental hazards: No Mark as dangerous for the environment is needed  
Special precautions for user: None known

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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.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 6

APVMA Approval Number: 49434

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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.