

Safety data sheet

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BASF Safety data sheet

Date / Revised: 20.11.2013

Version: 1.2

Product: **COSMOS INSECTICIDAL SEED TREATMENT**

(30488894/SDS_CPA_AU/EN)

Date of print 21.11.2013

1. Substance/preparation and company identification

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

HAZARDOUS SUBSTANCE, DANGEROUS GOOD

Harmful if swallowed.

Toxic by inhalation.

Toxic: danger of serious damage to health by prolonged exposure if swallowed.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Keep locked-up and out of reach of children.

Keep away from food, drink and animal feeding stuffs.

When using do not eat, drink or smoke.

If used frequently, obtain a supply of calcium gluconate gel.

This material and its container must be disposed of in a safe way.

Wear suitable gloves.

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In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

If swallowed, seek medical advice immediately and show this container or label.

Use appropriate container to avoid environmental contamination.

In case of accident by inhalation: remove casualty to fresh air and keep at rest.

3. Composition/information on ingredients

Chemical nature

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

Hazardous ingredients

fipronil

Content (W/W): 40 %

CAS Number: 120068-37-3

Hazard symbol(s): T, N

R-phrase(s): 23/24/25, 48/25, 50/53

The wording of the hazard symbols and R-phrases is specified in section 16 if dangerous ingredients are mentioned.

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:

Rinse mouth immediately and then drink plenty of water, induce vomiting, seek medical attention.

Note to physician:

Symptoms: convulsions, tremors, excitation

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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.

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. Cleaning operations should be carried out only while wearing breathing apparatus.

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.

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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 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

no exposure standard allocated

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) and other

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:	suspension
Colour:	red
Odour:	moderate odour, aromatic

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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 components.	
Flash point:		(Directive 92/69/EEC, A.9)
Flammability:	Non-flammable.	
Lower explosion limit:	not highly flammable	
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:	> 600 °C	(DIN 51794)
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 ³ (20 °C)	
Relative vapour density (air):	not determined	
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.

10. Stability and Reactivity

Conditions to avoid:

See MSDS section 7 - Handling and storage.

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Thermal decomposition: not determined

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.

11. Toxicological Information

Acute toxicity

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

LD50 rat (oral): 268 mg/kg
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

LC50 rat (by inhalation): 0.9 mg/l 4 h
An aerosol was tested.

LD50 rat (dermal): > 2,000 mg/kg
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Irritation

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

Primary skin irritation rabbit: non-irritant
The statement for skin irritation was derived from products of similar composition.

Primary irritations of the mucous membrane rabbit: non-irritant (OECD Guideline 405)

Sensitization

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

modified Buehler test guinea pig: Skin sensitizing effects were not observed in animal studies.
The statement for sensitization was derived from products of similar composition.

Repeated dose toxicity

Assessment of repeated dose toxicity:

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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.

Genetic toxicity

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.

Information on: Fipronil

Assessment of mutagenicity:

Results from a number of mutagenicity studies with microorganisms, mammalian cell culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic.

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. In long-term studies in rodents exposed to high doses, a tumorigenic effect was found; however, these results are thought to be due to a rodent-specific liver effect that is not relevant to humans.

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.

Information on: Fipronil

Assessment of reproduction toxicity:

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.

Information on: Fipronil

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Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

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*

Information on: fipronil

Aquatic invertebrates:

EC50 (48 h) 0.19 mg/l, *Daphnia magna*

LC50 (96 h) 0.00014 mg/l, *Mysidopsis bahia*

Information on: fipronil

Aquatic plants:

EC50 (96 h) 0.068 mg/l (biomass), *Scenedesmus subspicatus*

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.

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.

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Information on: Fipronil
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: 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.

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:

Hazard class:	6.1
Packing group:	III
ID number:	UN 2902
Hazard label:	6.1, EHSM
Proper shipping name:	PESTICIDE, LIQUID, TOXIC, N.O.S. (contains FIPRONIL TECHNICAL (88%))

Further information

Hazchem Code:2X
IERG Number:34

Sea transport

IMDG

Hazard class: 6.1

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Packing group:	III
ID number:	UN 2902
Hazard label:	6.1, EHSM
Marine pollutant:	YES
Proper shipping name:	PESTICIDE, LIQUID, TOXIC, N.O.S. (contains FIPRONIL TECHNICAL (88%))

Air transport

IATA/ICAO

Hazard class:	6.1
Packing group:	III
ID number:	UN 2902
Hazard label:	6.1
Proper shipping name:	PESTICIDE, LIQUID, TOXIC, N.O.S. (contains FIPRONIL TECHNICAL (88%))

15. Regulatory Information

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

Poisons Schedule: Drugs & Poisons, Schedule 6

Hazard symbol(s)

T	Toxic.
N	Dangerous for the environment.

R-phrases(s)

R22	Harmful if swallowed.
R23	Toxic by inhalation.
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s)

S1/2	Keep locked-up and out of reach of children.
S13	Keep away from food, drink and animal feeding stuffs.
S20/21	When using do not eat, drink or smoke.
S29	If used frequently, obtain a supply of calcium gluconate gel.
S35	This material and its container must be disposed of in a safe way.
S37	Wear suitable gloves.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S46	If swallowed, seek medical advice immediately and show this container or label.
S57	Use appropriate container to avoid environmental contamination.
S63	In case of accident by inhalation: remove casualty to fresh air and keep at rest.

