

Bayer CropScience
Safety Data Sheet
Belt® 480 SC Insecticide



Version 1 / AUS
102000010980

Revision Date: 02.04.2013
Print Date: 02.04.2013

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name	Belt® 480 SC Insecticide
Other names	none
Product code (UVP)	06364705
Chemical Group	benzenedicarboxamide
Recommended use	Insecticide
Chemical Formulation	Suspension concentrate (=flowable concentrate)(SC)
Company	Bayer Cropscience Pty Ltd –ABN 87 000 226 022 391-393 Tooronga Road, East Hawthorn Victoria 3123, Australia
Telephone	(03) 9248 6888
Technical Information Service	1800 804 479
Facsimile	(03) 9248 6800
Website	www.bayercropscience.com.au
Emergency telephone no.	1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

NON-HAZARDOUS SUBSTANCE

DANGEROUS GOODS

Hazardous classification	Non-Hazardous (National Occupational Health and Safety Commission - NOHSC)
R-phrases(s)	None allocated.
S-phrases(s)	See sections 4, 5, 6, 7, 8, 10, 12, 13.
ADG Classification	"Dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. - See Section 14.
SUSMP classification (Poison Schedule)	Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
Flubendiamide 480 g/l

Chemical Name	CAS-No.	Concentration [%]
Flubendiamide	272451-65-7	39.00
Glycerine	56-81-5	<= 10.00
1,2-Propanediol	57-55-6	1.35
Other ingredients (non-hazardous) to 100%		

SECTION 4. FIRST AID MEASURES



If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.

Inhalation

Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.

Skin contact

Take off contaminated clothing and shoes immediately. Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

Notes to physician

Symptoms

To date no symptoms are known.

Treatment

Treat symptomatically.
In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.
There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray
Carbon dioxide (CO₂)
Foam
Sand

Hazards from combustion products

In the event of fire the following may be released:
Hydrogen cyanide (hydrocyanic acid)
Hydrogen fluoride
Carbon monoxide (CO)
Sulphur oxides
Nitrogen oxides (NO_x)

Precautions for fire-fighting

Wear self-contained breathing apparatus and protective suit.
Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.
Whenever possible, contain fire-fighting water by diking area with sand or earth.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code •3Z

SECTION 6. ACCIDENTAL RELEASE MEASURES



Personal precautions

Keep unauthorized people away.
Avoid contact with spilled product or contaminated surfaces.
When dealing with a spillage do not eat, drink or smoke.
Use personal protective equipment.

Environmental precautions

Do not allow to get into surface water, drains and ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Clean contaminated floors and objects thoroughly, observing environmental regulations.
Keep in suitable, closed containers for disposal.

Reference to other sections

Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

Handling

Hygiene measures

Avoid contact with skin, eyes and clothing.
Keep working clothes separately.
Wash hands before breaks and immediately after handling the product.
Remove soiled clothing immediately and clean thoroughly before using again.
Garments that cannot be cleaned must be destroyed (burnt).

Storage

Requirements for storage areas and containers

Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Store in a place accessible by authorized persons only.
Keep away from direct sunlight.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
Flubendiamide	272451-65-7	0.5 mg/m ³ (TWA)		OES BCS
Glycerine (Mist.)	56-81-5	10 mg/m ³ (TWA)	08 2005	AU OEL
Glycerine (Inspirable dust.)	56-81-5	10 mg/m ³ (TWA)	08 2005	AU OEL
1,2-Propanediol (Particulate.)	57-55-6	10 mg/m ³ (TWA)	08 2005	AU OEL
1,2-Propanediol (Total vapour and particulates.)	57-55-6	474 mg/m ³ / 150 ppm (TWA)	08 2005	AU OEL



For further details on the Occupational Exposure Standards, see Section 16.

Biological limit values
none

Personal protective equipment - End user

General advice	Eye wash facility and safety shower should be available.
Respiratory protection	AS/NZS 1715/1716 approved respirator
Hand protection	Elbow-length PVC or nitrile gloves
Eye protection	Goggles
Skin and body protection	Cotton overall buttoned to the neck and wrist Washable hat

Engineering Controls

Advice on safe handling
Use only in area provided with appropriate exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
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Appearance

Form	suspension
Colour	white to light beige
Odour	weak, characteristic

Safety data

pH	6.5 - 7.5 at 100 % (23 °C)
Flash point	> 100 °C No flash point - Determination conducted up to the boiling point.
Ignition temperature	435 °C
Upper explosion limit	no data available
Lower explosion limit	no data available
Vapour pressure	no data available
Relative vapour density	no data available
Density	ca. 1.22 g/cm ³ at 20 °C
Water solubility	miscible
Partition coefficient: n-octanol/water	no data available
Other information	Further safety related physical-chemical data are not known.



SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	Extremes of temperature and direct sunlight.
Materials to avoid	Store only in the original container.
Hazardous Decomposition Products	Thermal decomposition can lead to release of: Carbon dioxide (CO ₂) Carbon monoxide Nitrogen oxides (NO _x) Sulphur oxides Hydrogen fluoride Hydrogen cyanide (hydrocyanic acid)
Thermal decomposition	Stable under normal conditions.
Hazardous reactions	No dangerous reaction known under conditions of normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Inhalation	Low acute inhalation toxicity.
Skin	May cause skin irritation. Non-sensitizing.
Eye	May cause eye irritation.
Ingestion	Low acute oral toxicity.
Chronic exposure	Based on animal studies, no adverse effects or symptoms would be expected from chronic exposure to this material.
Acute oral toxicity	LD ₅₀ (rat) > 2,000 mg/kg
Acute inhalation toxicity	LC ₅₀ (rat) > 2.564 mg/l Exposure time: 4 h Highest attainable concentration. Determined in the form of a respirable aerosol.
Acute dermal toxicity	LD ₅₀ (rat) > 4,000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	No eye irritation (rabbit)
Sensitisation	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test
Chronic toxicity	Flubendiamide did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity

Flubendiamide was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity



Flubendiamide was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment Toxicity to Reproduction

Flubendiamide did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Flubendiamide did not cause developmental toxicity in rats and rabbits.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) > 250 mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates	EC50 (Water flea (<i>Daphnia magna</i>)) 0.0065 mg/l Exposure time: 48 h
Toxicity to aquatic plants	IC50 (<i>Pseudokirchneriella subcapitata</i>) > 0.07 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient. No acute toxicity was observed at its limit of water solubility.

Additional ecological information

No other effects to be mentioned.

Biodegradability	Readily biodegradable. The value mentioned relates to the active ingredient flubendiamide.
Stability in soil	DT50 13 d. Depending on photolysis. The value mentioned relates to the active ingredient flubendiamide. DT50 600 d. Depending on microbial activity. The value mentioned relates to the active ingredient flubendiamide.
Bioaccumulation	no data available
Additional Environmental Information	no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Metal drums and plastic containers:

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SECTION 14. TRANSPORT INFORMATION

ADG

UN number

3082

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Class	9
Subsidiary Risk	None
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUBENDIAMIDE)
Hazchem Code	•3Z

According to AU01, Environmentally Hazardous Substances in packagings, IBC or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

IMDG

UN number	3082
Class	9
Subsidiary Risk	None
Packaging group	III
EmS	F-A , S-F
Marine pollutant	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUBENDIAMIDE)

IATA

UN number	3082
Class	9
Subsidiary Risk	None
Packaging group	III
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUBENDIAMIDE)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 61223
See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information Belt® is a registered trademark of the Bayer Group.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.



Further details on the Occupational Exposure Standards mentioned in Section 8:

CEILING: Ceiling Limit Value

OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.

SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.

TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.
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END OF SDS