

Bayer Environmental Science
Safety Data Sheet
Silvashield® Injectable Tree Insecticide



Version 1 / AUS
102000014349

Revision Date: 21.09.2012

SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: **Silvashield® Injectable Tree Insecticide**
Other names: None
Product code (UVP): 05956357
Recommended use: Insecticide

Chemical formulation: Soluble concentrate (SL)

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.bayeres.com.au
Contact: (03) 9248 6888 Technical Manager

Emergency telephone no.: 1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview	
HAZARDOUS SUBSTANCE	DANGEROUS GOODS
Hazardous classification:	Hazardous (National Occupational Health and Safety Commission - NOHSC).
R-phrase(s):	R36/38 – Irritating to eyes and skin. R50/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s):	See sections 4, 5, 6, 7, 8, 10, 13.
ADG Classification:	Not a "Dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. For transport by sea, Silvashield Injectable Tree Insecticide is a MARINE POLLUTANT. 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: Imidacloprid 200 g/L

Chemical Name	CAS-No.	Concentration [%]
Imidacloprid	138261-41-3	17.10
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. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice. Call a physician or poison control center immediately.

Skin contact

Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Eye contact

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

Ingestion

Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Notes to physician

Treatment

Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.
There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Foam
Carbon dioxide (CO₂)
Water spray
Dry powder

Hazards from combustion products

Dangerous gases are evolved in the event of a fire.

Precautions for fire-fighting

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
Keep out of smoke.
Fight fire from upwind position.
Cool closed containers exposed to fire with water spray.
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.
Isolate hazard area.
Avoid contact with spilled product or contaminated surfaces.

Environmental precautions

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.
Apply this product as specified on the label.
Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.
Do not allow to get into surface water, drains and ground water.

Methods for cleaning up

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

Additional advice

Use personal protective equipment.

SECTION 7. HANDLING AND STORAGE

Handling

Hygiene measures:

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Hygiene measures:

Remove Personal Protective Equipment (PPE) immediately after handling this product.
Before removing gloves clean them with soap and water.
Remove soiled clothing immediately and clean thoroughly before using again.
Wash thoroughly and put on clean clothing.

Storage

Requirements for storage areas and containers:

Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed.
Store in original container and out of the reach of children, preferably in a locked storage area.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
Imidacloprid	138261-41-3	0.7 mg/m ³ (TWA)		OES BCS

Bayer Environmental Science
Safety Data Sheet
Silvashield® Injectable Tree Insecticide



Version 1 / AUS
102000014349

Revision Date: 21.09.2012

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

Personal protective equipment - End user

Respiratory protection: Not normally required.
Hand protection: Elbow-length PVC or nitrile gloves.
Eye protection: Not normally required.
Skin and body protection: Cotton overall buttoned to the neck and wrist.

Engineering controls

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: Liquid, clear
Colour: Gold
Odour: No data available

Safety data

pH: 6.3 - 7.5 at 10 %
Flash point: 96.7 °C
Ignition temperature: No data available
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. 1.17 g/cm³ at 20 °C
Water solubility: Miscible
Partition coefficient: n-octanol/water: No data available

SECTION 10. STABILITY AND REACTIVITY

Chemical stability: Stable under recommended storage conditions.



SECTION 11. TOXICOLOGICAL INFORMATION

Potential health effects

Skin:	Harmful if absorbed through skin. Avoid contact with skin and clothing.
Eye:	May cause mild irritation to eyes. Avoid contact with eyes.
Ingestion:	Harmful if swallowed. Do not take internally.
Chronic exposure:	This product or its components may have target organ effects.

Animal toxicity data

Acute oral toxicity:	LD ₅₀ (rat) > 2,000 mg/kg
Acute inhalation toxicity:	LC ₅₀ (rat) > 6.3 mg/L Exposure time: 4 h Determined in the form of liquid aerosol. (actual)
Acute inhalation toxicity:	LC ₅₀ (rat) > 20 mg/L Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC ₅₀ . (actual)
Acute dermal toxicity:	LD ₅₀ (rabbit) > 4,000 mg/kg
Skin irritation:	No skin irritation (rabbit).
Eye irritation:	Mild eye irritation (rabbit).
Sensitisation:	Non-sensitizing (guinea pig).

Assessment mutagenicity

Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

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

Assessment toxicity to reproduction

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

Assessment developmental toxicity

Imidacloprid did not cause developmental toxicity in rats and rabbits.

Chronic toxicity

Imidacloprid did not cause any significant specific adverse effects or target organ toxicity in subchronic toxicity studies.

Assessment neurotoxicity

Imidacloprid showed slight behavioral and activity changes only at the highest dose tested in neurotoxicity studies in rats. There were no correlating morphological changes observed in the neural tissues.



SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish:	LC ₅₀ (<i>Oncorhynchus mykiss</i> (Rainbow trout)) > 535 mg/L Exposure time: 96 h
Toxicity to aquatic invertebrates:	EC ₅₀ (Water flea (<i>Daphnia magna</i>)) > 535 mg/L Exposure time: 24 h
Toxicity to aquatic invertebrates:	EC ₅₀ (<i>Chironomus riparius</i> (non-biting midge)) 0.0552 mg/L Exposure time: 24 h The value mentioned relates to the active ingredient.
Toxicity to aquatic plants:	IC ₅₀ (<i>Desmodemus subspicatus</i>) > 1,000 mg/L Growth rate Exposure time: 72 h

SECTION 13. DISPOSAL CONSIDERATIONS

Metal drums and plastic containers

Rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Dispose of at 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
Class	9
Subsidiary Risk	None
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IMIDACLOPRID SOLUTION)
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. (IMIDACLOPRID SOLUTION)

IATA

UN number	3082
Class	9

Bayer Environmental Science
Safety Data Sheet
Silvashield® Injectable Tree Insecticide



Version 1 / AUS
102000014349

Revision Date: 21.09.2012

Subsidiary Risk	None
Packaging group	III
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IMIDACLOPRID SOLUTION)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994.

Australian Pesticides and Veterinary Medicines Authority approval number: 62475.

See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information

Silvashield® 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.

Bayer Environmental Science
Safety Data Sheet
Silvashield® Injectable Tree Insecticide



Version 1 / AUS
102000014349

Revision Date: 21.09.2012

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

Reason for revision: Changed name from Material Safety Data Sheet to Safety Data Sheet.

END OF SDS

Bayer Environmental Science
Safety Data Sheet
TRIBUTE® SELECTIVE TURF HERBICIDE



Version 0 / AUS
102000022418

Revision Date: 17.10.2013

Further details on the Occupational Exposure Standards mentioned in Section 8

CEILING: Ceiling Limit Value

OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

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.

END OF SDS