

# Bayer Environmental Science

## Safety Data Sheet

### Starycide® 48SC Insect Growth Regulator



Version / NZ  
102000017278

Revision Date: 23.07.2012

#### SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: **Starycide® 48SC Insect Growth Regulator**  
Other names: None  
Product code (UVP): 79037848  
Recommended use: Insecticide

Chemical formulation: Suspension concentrate (=flowable concentrate)(SC)

Company: Bayer New Zealand Limited  
3 Argus Place  
Glenfield  
Auckland  
New Zealand

Telephone: 0800 227 012  
Facsimile: 0800 227 011  
Website: [www.bayeres.com.au](http://www.bayeres.com.au)  
Emergency telephone no.: 0800 734 607 Orica SH&E Shared Services (24 hr)

#### SECTION 2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE	Emergency Overview	DANGEROUS GOODS
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Hazardous classification:	Classified as hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
HSNO classifications:	6.3B, 6.4A, 6.5B, 6.9B (All), 6.9B (O), 9.1B (All), 9.1B (C), 9.4B. Causes mild skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause damage to organs. Harmful to aquatic life with long lasting effects. Toxic to terrestrial invertebrates.
GHS pictograms:	
Signal word:	Warning.
R-phrase(s):	R36/38 - Irritating to eyes and skin. R43 - May cause sensitization by skin contact. R51 - 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, 12, 13.
Dangerous goods classification:	"Dangerous goods" for transport according to NZS 5433:1999, UN, IMDG or IATA - See Section 14.



**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical nature: Triflumuron 48 g/L

Chemical Name	CAS-No.	Concentration [%]
Triflumuron	64628-44-0	4.27
1,2-Benzisothiazol-3(2H)-one	2634-33-5	0.05
Mixture of 5-Chlor-2-methyl-3(2H)-isothiazolon and 2-Methyl-2H-isothiazol-3-on	55965-84-9	0.10
Other ingredients (non-hazardous) to 100 %		

**SECTION 4. FIRST AID MEASURES**

**In case of poisoning by any exposure route contact the National Poisons and Hazardous Chemicals Information Centre, P.O. Box 913, Dunedin. Phone 0800 764 766, 0800 POISON and follow the advice given. Show this Safety Data Sheet to the doctor.**

**Workplace facilities**

Ensure washing facilities are available.

**Inhalation**

Move the victim to fresh air and keep at rest. If symptoms persist, call a physician.

**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.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation or redness persists, see an ophthalmologist.

**Ingestion**

Keep at rest. If symptoms persist, call a physician.

**Notes to physician**

**Treatment**

Treat symptomatically.

**SECTION 5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media**

Water spray  
Foam  
Dry powder  
Carbon dioxide (CO<sub>2</sub>)  
Sand

**Hazards from combustion products**

In the event of fire the following may be released:  
Hydrogen chloride (HCl)

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Hydrogen fluoride  
Hydrogen cyanide (hydrocyanic acid)  
Carbon monoxide (CO)  
Nitrogen oxides (NO<sub>x</sub>)

#### Precautions for fire-fighting

In the event of fire, wear self-contained breathing apparatus.  
Contain the spread of the fire-fighting media.  
Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code •3Z

## SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

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

#### Environmental precautions

Contain contaminated water and fire fighting water.  
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).

Avoid dust formation.

Collect and transfer the product into a properly labelled and tightly closed container.

- For quantities up to 50 L of product bury in a secure approved landfill site.
- For quantities greater than 50 L seek advice from the manufacturer (use emergency contact number) before attempting disposal. Contain in a secure location until disposal method is established.

Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable. Avoid solvents.

## SECTION 7. HANDLING AND STORAGE

#### Handling

Hygiene measures:

When using, do not eat, drink or smoke.

Remove soiled clothing immediately and clean thoroughly before using again.

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

Wash hands immediately after work, if necessary take a shower.

#### Storage

Requirements for storage areas and containers:

Keep out of the reach of children.

Protect against moisture.

Keep away from direct sunlight.

Keep containers tightly closed in a dry, cool and well-ventilated place.

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.

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Suitable materials:  
HDPE (high density polyethylene)

#### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

##### Exposure standards

No exposure standard has been assigned for the product or its ingredients.

##### Personal protective equipment - End user

General advice: Eye wash facility and safety shower should be available.  
Follow all label instructions.

Respiratory protection: No personal respiratory protective equipment normally required.

Hand protection: Elbow-length PVC or nitrile gloves.

##### Engineering controls

Advice on safe handling:  
No engineering controls are required for the normal use of this product according to labeled directions for use.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

##### Appearance

Form: Liquid, suspension  
Colour: Tan to grey  
Odour: Slight

##### Safety data

pH: 6.0 - 8.0 at 100 % (20 °C)  
Flash point: No data available  
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. 1.12 g/cm<sup>3</sup> at 20 °C  
Water solubility: No data available  
Partition coefficient: n-octanol/water: No data available

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**SECTION 10. STABILITY AND REACTIVITY**

Chemical stability:	Stable under normal conditions.
Conditions to avoid:	Extremes of temperature and direct sunlight.
Incompatible materials:	None known.
Hazardous decomposition products:	Thermal decomposition can lead to release of: Hydrogen chloride (HCl) Hydrogen fluoride Hydrogen cyanide (hydrocyanic acid) Carbon monoxide Nitrogen oxides (NO <sub>x</sub> )
Hazardous reactions:	No dangerous reaction known under conditions of normal use.

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Potential health effects**

Inhalation:	May cause irritation.
Skin:	Irritating to skin.
Eye:	Causes eye irritation.

**Animal toxicity studies**

Acute oral toxicity:	LD <sub>50</sub> (rat) > 5,000 mg/kg The value mentioned relates to the active ingredient triflumuron.
Acute dermal toxicity:	LD <sub>50</sub> (rat) > 5,000 mg/kg The value mentioned relates to the active ingredient triflumuron.
Skin irritation:	Slight irritation (rabbit). The value mentioned relates to the active ingredient triflumuron.
Eye irritation:	No eye irritation (rabbit). The value mentioned relates to the active ingredient triflumuron.

**HSNO classifications**

6.3B, 6.4A, 6.5B, 6.9B.  
Causes mild skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
May cause damage to organs.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects**

Toxicity to fish:	LC <sub>50</sub> ( <i>Oncorhynchus mykiss</i> (Rainbow trout)) > 320 mg/L Exposure time: 96 h The value mentioned relates to the active ingredient triflumuron.
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Toxicity to fish:	LC <sub>50</sub> ( <i>Leuciscus idus</i> (Golden orfe)) > 100 mg/L Exposure time: 96 h The value mentioned relates to the active ingredient triflumuron.
Toxicity to aquatic invertebrates:	EC <sub>50</sub> ( <i>Daphnia magna</i> (Water flea)) 0.23 mg/L Exposure time: 48 h The value mentioned relates to the active ingredient triflumuron.
Toxicity to aquatic plants:	EC <sub>50</sub> ( <i>Scenedesmus quadricauda</i> (Green algae)) > 25 mg/L Exposure time: 96 h The value mentioned relates to the active ingredient triflumuron.
Toxicity to other organisms:	LD <sub>50</sub> ( <i>Colinus virginianus</i> (Bobwhite quail)) 561 mg/kg The value mentioned relates to the active ingredient triflumuron.

**HSNO classifications**

9.1B, 9.4B.  
Harmful to aquatic life with long lasting effects.  
Toxic to terrestrial invertebrates.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Product**

Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.

**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. (TRIFLUMURON SOLUTION)
Hazchem Code	•3Z

**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.

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(TRIFLUMURON SOLUTION)

**IATA**

UN-Number	<b>3082</b>
Class	9
Subsidiary Risk	None
Packaging group	III
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLUMURON SOLUTION )

**SECTION 15. REGULATORY INFORMATION**

EPA approval number: APPROVED PURSUANT TO THE HSNO ACT 1996, No. HSR008007.  
See [www.epa.govt.nz](http://www.epa.govt.nz) for approval controls.

ACVM approval: NZFSA Approved Type B (All animal product except dairy).

See also Section 2.

**SECTION 16. OTHER INFORMATION**

**Trademark information**

Starycide® is 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.

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