

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name BIFORCE 100SC TERMITICIDE AND INSECTICIDE

Synonym(s) BIFENTHRIN 100 G/LT SUSPENSION CONCENTRATE • BIFORCE 10 SC

1.2 Uses and uses advised against

Use(s) TERMICIDE AND INSECTICIDE

1.3 Details of the supplier of the product

Supplier name SHERWOOD CHEMICALS AUSTRALASIA PTY LTD

Address Level 3, 1060 Hay Street, West Pert, WA, 6005, AUSTRALIA

Telephone +61 8 9219 4683 **Fax** +61 8 9219 4672

 Email
 contact@sherwoodchemicals.com.au

 Website
 http://www.sherwoodchemicals.com.au

1.4 Emergency telephone number(s)

Emergency +61 421 667972

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

GHS classification(s) Aquatic Toxicity (Chronic): Category 2

Acute Toxicity: Oral: Category 4

Serious Eye Damage / Eye Irritation: Category 2A

2.2 Label elements

Signal word WARNING

Pictogram(s)





Hazard statement(s)

H302 Harmful if swallowed. H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Prevention statement(s)

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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Response statement(s)

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P330 Rinse mouth.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P391 Collect spillage.

Storage statement(s)

None allocated.

Disposal statement(s)

P501 Dispose of contents/container in accordance with relevant regulations.

2.3 Other hazards

No information provided.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
BIFENTHRIN	82657-04-3	617-373-6	10%
WATER	7732-18-5	231-791-2	>60%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	<20%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to

stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).

First aid facilities No information provided.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture

Combustible. May evolve toxic gases (carbon oxides, fluorides, chlorides, hydrocarbons) when heated to decomposition.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES



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6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with sodium carbonate or similar, collect and place in suitable containers for treatment and/or disposal. Only trained personnel should undertake clean up.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Do not store near sources of ignition or incompatible materials. Containers should be stored below 45°C in a secure area and upright to prevented from falling. Containers should also be stored in a dry, well ventilated area constructed of non-combustible material with firm level floor (preferably concrete), away from areas of heavy traffic and emergency exits. Store as a Class C1 Combustible Liquid (AS1940).

7.3 Specific end use(s)

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

No exposure standards have been entered for this product.

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls Avoid inhalation. If using indoors, ensure there is adequate natural ventilation. Increase air flow by opening

windows/doors or using mechanical extraction units.

PPE

Eye / Face Wear splash-proof goggles.

Wear viton (R) or nitrile gloves. If spraying, wear full-length viton (R) or full-length nitrile gloves. Hands

Body Wear coveralls and rubber boots. If spraying, wear a washable hat.

Respiratory Wear a Type A (Organic vapour) respirator. If spraying, wear a Full-face Type A-Class P1 (Organic

gases/vapours and Particulate) respirator or an Air-line respirator.











9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

BEIGE TO WHITE LIQUID **Appearance** Odour SLIGHT ODOUR

Flammability CLASS C1 COMBUSTIBLE

> 100°C Flash point

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9.1 Information on basic physical and chemical properties

100°C (Approximately) **Boiling point**

Melting point $< 0^{\circ}C$

Evaporation rate AS FOR WATER NOT AVAILABLE pН Vapour density **NOT AVAILABLE** Specific gravity 1.03 (Approximately)

Solubility (water) **INSOLUBLE** Vapour pressure 18 mm Hg @ 20°C **Upper explosion limit** NOT AVAILABLE Lower explosion limit NOT AVAILABLE NOT AVAILABLE Partition coefficient NOT AVAILABLE Autoignition temperature NOT AVAILABLE Decomposition temperature Viscosity NOT AVAILABLE **Explosive properties** NOT AVAILABLE **Oxidising properties** NOT AVAILABLE **Odour threshold** NOT AVAILABLE

9.2 Other information

% Volatiles > 60 % (Water)

10. STABILITY AND REACTIVITY

10.1 Reactivity

Eye

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), heat and ignition sources.

10.6 Hazardous decomposition products

May evolve toxic gases (carbon oxides, fluorides, chlorides, hydrocarbons) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxic. This product has the potential to cause adverse health effects. Use safe work practices to avoid eye or **Health hazard** skin contact and inhalation. Upon dilution, the potential for adverse health effects may be reduced. Chronic summary

exposure may result in liver, kidney, blood and central nervous system (CNS) damage.

Irritant. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged

contact.

Irritant - toxic. Over exposure may result in mucous membrane irritation of the respiratory tract, coughing and Inhalation

headache. High level exposure may result in CNS stimulation with nervousness, salivation, dizziness, tremors, breathing difficulties (wheezing) and unconsciousness. Inhalation LC50 is 8.7 mg/L/4 hours.

Toxic - irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May be absorbed Skin

through skin with harmful effects. May cause sensitisation by skin contact. Dermal LD50 (rabbit) is > 2000

mg/kg.

Toxic. Ingestion may result in nausea, vomiting, salivation, breathing difficulties, hyperexcitability, anxiety, Ingestion

bloody nasal discharge, tremors and convulsions. Aspiration or inhalation may cause chemical pneumonitis

and pulmonary oedema. Oral LD50 (rat) is 540 mg/kg.

BIFENTHRIN (82657-04-3) **Toxicity data**

> LC50 (inhalation) 4.9 mg/l/4 hours (rat) LD50 (ingestion) 54.5 mg/kg (rat) LD50 (skin) 2 g/kg (rabbit)

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12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The active ingredient, Bifenthrin, is highly toxic to fish and aquatic arthropods with LC50 values ranging from $0.0038 \,\mu\text{g/L}$ to $17.8 \,\mu\text{g/L}$.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

Synthetic pyrethroids have been shown to be toxic to fish, aquatic arthropods and bees in laboratory tests. However, in practical use, no serious adverse effects have been reported due to the small quantities used and lack of persistence in the environment. The toxicity of synthetic pyrethroids in birds and domestic animals is low [WHO; Environmental Health Criteria 99: Cyhalothrin p.13 (1990)].

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Residual product will be disposed of when the container is returned. Contact the manufacturer/supplier for

additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD (IN ACCORDANCE WITH IATA AND IMDG ONLY)

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None Allocated	3082	3082
14.2 Proper Shipping Name	None Allocated	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
14.3 Transport hazard class	None Allocated	9	9
14.4 Packing Group	None Allocated	III	III

14.5 Environmental hazards Marine Pollutant

14.6 Special precautions for user

Hazchem code None Allocated
EMS F-A, S-F

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison schedule Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and

Labelling of Chemicals.

The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous

Substances [NOHSC: 1008(2004)].

Hazard codes N Dangerous for the environment

Xi Irritant Xn Harmful

Risk phrases R22 Harmful if swallowed.

R36 Irritating to eyes.

R51/53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

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Safety phrases	S2	Keep out of reach of children.
•	S7	Keep container tightly closed.
	S13	Keep away from food, drink and animal feeding stuffs.
	S23	Do not breathe gas/fumes/vapour/spray (where applicable).
	S25	Avoid contact with eyes.

Inventory listing(s) AUSTRALIA: AICS (Australian Inventory of Chemical Substances)

All components are listed on AICS, or are exempt.

16. OTHER INFORMATION

Additional information

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS#	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pН	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Revision history

Revision	Description
2.0	Standard SDS Review
1.0	Standard SDS Review



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Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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