

Material Safety Data Sheet



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: BULLET (R) MITICIDE

Synonyms:

CAS-No.:

Molecular Formula:

Supplier: Crop Care Australasia Pty Ltd

ACN: 061 362 347

Street Address: 77 Tingira Street
Pinkenba
Queensland 4008
Australia

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Emergency telephone number: 1 800 033 111 (ALL HOURS)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Recommended use: Miticide.

Appearance: Dark brown liquid.

CHEMICAL ENTITY	CAS NO.	PROPORTION
Propargite	2312-35-8	60% (600 g/L)
Liquid hydrocarbon	-	MED
Other ingredients determined not to be hazardous-		MED

		100%

PROPORTION (% weight per weight):

VHIGH >60, HIGH 30-60, MED 10-29, LOW 1-9, VLOW <1

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS) or are National Registration Authority (NRA) approved active constituent.

3. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Worksafe Australia.

Hazard Category

Xn Harmful
Xi Irritant

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R-phrases(s)

R22 Harmful if swallowed.
R36 Irritating to eyes.
R65 Harmful: May cause lung damage if swallowed.

Not Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG) for transport by Road and Rail.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

Poisons Schedule (Aust)/Toxic Substance (NZ): S6

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126; New Zealand 03 474 7000).

Ingestion: Rinse mouth with water. If swallowed, and if more than 15 minutes from a hospital, induce vomiting, preferably using Ipecac Syrup APF. Never give anything by mouth to an unconscious patient. Seek medical advice.

Eye contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Skin contact: Wash contaminated skin with plenty of water. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Specific hazards: Combustible liquid.

Fire fighting further advice: Combustible liquid. On burning will emit toxic fumes including oxides of sulphur. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

Suitable extinguishing media: Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

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6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS: Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers for disposal. Wash area down with detergent and excess water.

LARGE SPILLS: Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled drums for disposal. Wash area down with detergent and excess water. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture.

7. HANDLING AND STORAGE

Storage: 110L ONLY: Store in the closed, original container in a well-ventilated area, as cool as possible. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. Do NOT store for prolonged periods in direct sunlight.

200L: Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight

1000L: Store this tightly closed minibulk container in a safe and secure place away from children, animals, food and feedstuffs. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior to initial use then the integrity of this product cannot be assured. If this occurs Crop Care Australasia Pty Ltd should be advised immediately. Store in a cool, dry, well ventilated area away from excessive heat.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits

No value assigned for this specific material by the National Occupational Health and Safety Commission (Worksafe Australia).

Engineering measures: IN THE WORKPLACE: Use only in well ventilated areas. Keep containers closed when not in use.

Personal protection equipment: OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES (Short), RESPIRATOR.

Code:H -Orica Personal Protection Guide No.1, 1998

MANUFACTURE, PACKAGING AND TRANSPORT: Avoid skin and eye contact and the inhalation of vapour. Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash

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hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

PREPARATION AND USE OF PRODUCT: When mixing and using avoid contact with eyes and skin. Do not inhale spray mist. When preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC gloves, face shield and goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC gloves and goggles. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield, goggles and contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Dark brown liquid.

Solubility: Emulsifiable in water. Soluble in organic solvents.

Specific Gravity (20 C)	: 1.004	Melting Point (C)	: N App
Rel Vapour Density (air=1)	: >1	Boiling Range (C)	: 235-264
Vapour Pressure (20 C)	: N Av	Decomp. Point (C)	: N Av
Flash Point (C)	: 71	Sublimation Point	: N App
Flammability Limits (%)	: N Av	pH	: N App
Autoignition Temp (C)	: N Av	Viscosity	: N Av
% Volatile by volume	: N Av	Evaporation Rate	: N Av
Solubility in water (g/L)	: N Av	(n-Butyl acetate=1)	
LogPow (Propargite)	: 3.72		

(Typical values only - consult specification sheet)

N Av = Not available

N App = Not applicable

10. STABILITY AND REACTIVITY

Stability: Reacts with strong acids and alkalis. Product is stable for at least 2 years under ambient storage conditions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, depression, abdominal pain and central nervous system depression. If the victim is uncoordinated there is greater likelihood of vomit entering the lungs and causing subsequent complications. Aspiration pneumonia (inflammation of the lung) may result. (1,2)

Eye contact: An eye irritant.

Skin contact: Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged contact may lead to irritant contact dermatitis.

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Inhalation: Vapour may be irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and, if exposure is prolonged, unconsciousness. (1)

Long Term Effects

No information available for product.

Acute toxicity / Chronic toxicity

No LD50 data available for the product. However for the constituents:

PROPARGITE: (1)

Oral LD50 (rat): 2800 mg/kg.

Oral LD60 (rabbit): 311 mg/kg.

Dermal LD50 (rabbit): 4000 mg/kg.

Inhalation LC50 (rat): 0.89 mg/L/4hr.

SKIN: Severe irritant (rabbit). Not a skin sensitiser (guinea pig).

EYES: Severe irritant (rabbit).

In two year feeding trials in rats and dogs no observable adverse effects (NOEL) resulted from the ingestion of 45 mg/kg/day and 22 mg/kg/day respectively of propargite.

Negative in IN VITRO mutagenicity assays.

Studies in animals indicate that propargite does not cause adverse reproductive effects, and causes teratogenic effects at only maternally toxic doses, i.e. it is not teratogenic.

In a two year feeding study in rats, animals fed 100 mg/kg/day had enlarged and/or dark red lymph nodes that were associated with abdominal masses.

ADI (Acceptable Daily Intake) for humans is 0.02 mg/kg/day. (3)

LIQUID HYDROCARBON

Workers exposed to solvents in high concentrations, will typically show signs of central nervous system depression. Disorientation, euphoria, giddiness and confusion, progressing to unconsciousness paralysis, convulsion and death from respiratory or cardiovascular arrest may be observed. (2)

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

For the active ingredient:

PROPARGITE: (1)

AQUATIC TOXICITY:

Very toxic to aquatic organisms.

96hr LC50 (bluegill sunfish): 0.1 mg/L.

96hr LC50 (rainbow trout): 0.12 mg/L.

96hr LC50 (catfish): 0.04 mg/L.

96hr LC50 (grass shrimp): 0.101 mg/L.

96hr LC50 (fiddler crabs): >500 mg/L.

96hr LC50 (sheepshead minnow): 0.06 mg/L.

48hr LC50 (atlantic oyster larvae): 0.072 mg/L.

48hr LC50 (water flea): 0.09 mg/L.

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48hr LC50 (daphnia magna): 0.082 mg/L.

TERRESTRIAL TOXICITY:

Oral LD50 (mallard duck): >4640 mg/kg.

Dermal LD50 (bee): 15 ug/bee.

5day LC50 (mallard duck): >4640 mg/kg.

5day LC50 (bobwhite quail): 3401 mg/kg.

LogPow is 3.72

Risk of bioaccumulation in an aquatic species is moderate.

May cause long term adverse effects in the environment.

ENVIRONMENTAL PERSISTENCE

Propargite is 50 % degraded in most soils in 7-14 weeks. It is strongly adsorbed in clay, Koc 23,000-90,000.

13. DISPOSAL CONSIDERATIONS

110L: Empty contents fully into application equipment. Close all valves and return to point of supply for refillor storage.

200L: 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.

1000L: This minibulk container is reusable and remains the property of Crop Care Australasia Pty Ltd. No other liquid, solid or pesticide product should be put into it. When empty, return to Crop Care Australasia Pty Ltd for cleaning, relabelling and refilling.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG) for transport by Road and Rail.

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN-No: 3082
Class: 9 Miscellaneous Dangerous Goods
Packing group: Packing Group 3

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(CONTAINS PROPARGITE)

This material is classified as a Marine Pollutant according to the International Maritime Dangerous Goods Code.

Air Transport

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Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN-No: 3082
Class: 9 Miscellaneous Dangerous Goods
Packing group: Packing Group 3

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(CONTAINS PROPARGITE)

15. REGULATORY INFORMATION

This material is hazardous according to health criteria of Worksafe Australia.

Hazard Category

Xn Harmful
Xi Irritant

R-phrase(s)

R22 Harmful if swallowed.
R36 Irritating to eyes.
R65 Harmful: May cause lung damage if swallowed.

S-phrase(s)

S1/2 Keep locked up and out of reach of children.
S13 Keep away from food, drink and animal foodstuffs.
S24/25 Avoid contact with skin and eyes.
S36/37 Wear suitable protective clothing and gloves.

Poisons Schedule (Aust)/Toxic Substance (NZ): S6

16. OTHER INFORMATION

Literary reference

- (1) Material Safety Data Sheet - Propargite Technical (CDS 18423) IPEZA SA 1999.
- (2) In Casarett and Doulls Toxicology. (Ed. Klassen CD). 5th Ed. p739. (The McGraw Hill Companies, Inc., USA, 1996)
- (3) ADI List. Commonwealth Department of Health and Family Services. 01/2000.

This Material Safety Data Sheet has been prepared by SHE Pacific Pty Ltd on behalf of its clients.

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Reason(s) For Issue: ALIGNMENT TO WORKSAFE REQUIREMENTS

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Orica Limited and its subsidiaries cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

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

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