



MATERIAL SAFETY DATA SHEET

Non hazardous according to criteria of NOHSC Australia.

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

Product name: **SEARLES BUG BEATER NATURAL PYRETHRUM SPRAY**

Use: For the control of aphids, thrips, caterpillars, ants, flies, earwigs, cabbage moths, whiteflies and leafhoppers on indoor and outdoor plants, vegetables, flowers and ornamentals.

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2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL	ENTITY CAS NO.	PROPORTION
Pyrethins	8003-34-7	0.3 g/L
Piperonyl Butoxide	51-03-6	1.2 g/L
Non hazardous ingredients	-	< 10 g/L
Water	7732-18-5	Balance
		100%

3. HAZARDS IDENTIFICATION

Based on available information, this material is not classified as hazardous according to criteria of NOHSC Australia.

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

Poisons Schedule (Aust):

This material is not a Scheduled Poison.

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Skin contact: If skin contact occurs, remove contaminated clothing and wash skin. If irritation occurs seek medical advice.

Eye contact: If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion: Rinse mouth with water. Give plenty of water to drink. If vomiting occurs give further water. Seek medical advice.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Specific hazards: Non-combustible material.

Fire fighting further advice: Not combustible, however following evaporation of aqueous component residual material can burn if ignited. On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

Suitable extinguishing media: Not combustible, however, if material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage.

LARGE SPILLS

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture.

7. HANDLING AND STORAGE

Handling: Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

Storage: Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. Keep container closed at all times - check regularly for leaks.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits

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

However for:

	TWA		STEL		CARCINOGEN CATEGORY	NOTICES
	ppm	mg/m3	ppm	mg/m3		
Pyrethrins*	-	5	-	-	-	-

* Suppliers recommendation.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Engineering measures: Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

Personal protection equipment: OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.

Avoid skin and eye contact and inhalation of mist. Wear overalls, chemical goggles and impervious gloves. Available information suggests that gloves made from PVC should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, a final assessment should be made by the user. Use with adequate ventilation. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Amber coloured liquid.

Solubility:	Miscible
Specific Gravity (20 °C):	1.01-1.02
Relative Vapour Density (air=1):	N Av
Vapour Pressure (20 °C):	N Av
Flash Point:	N App
Flammability Limits (%):	N App
Autoignition Temperature (°C):	N App
% Volatile by Volume:	N Av
Solubility in water (g/L):	Miscible
Melting Point/Range (°C):	0 approx.
Boiling Point/Range (°C):	100 approx.
Decomposition Point (°C):	N App
pH:	N Av
Viscosity:	N Av

(Typical values only - consult specification sheet)
N Av = Not available N App = Not applicable

10. STABILITY AND REACTIVITY

Stability: No information available.

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 or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material may be irritant to mucous membranes and respiratory tract.

Skin contact: Slightly irritating to skin. May cause dermatitis to sensitive individuals.

Eye contact: Slightly irritating to eyes.

Ingestion: Swallowing can result in nausea, vomiting, abdominal pain and irritation to the gastrointestinal tract.

Long Term Effects: No information available for product.

Acute toxicity / Chronic toxicity

No LD50 data available for the product. However, for the constituent,

Pyrethrins: (1)

Oral LD50 (rat, male):	2,370 mg/kg
Oral LD50 (rat, female):	1,030 mg/kg
Oral LD50 (mice):	273-796 mg/kg
Dermal LD50 (rat):	> 1,500 mg/kg
Dermal LD50 (rabbit):	5,000 mg/kg
4hr LC50 (rat):	3.4 mg/L
Skin irritant (rabbit):	Slightly irritating
Eye irritant (rabbit):	Slightly irritating

Piperonyl Butoxide: (1)

Oral LD50 (rat):	7,500 mg/kg
Dermal LD50 (rat):	> 7,950 mg/kg
Dermal LD50 (rabbit):	1,880 mg/kg

12. ECOLOGICAL INFORMATION

No environmental impact data found for this product, however:

For the active constituent Pyrethrins: (1)

AQUATIC TOXICITY:

Very toxic to aquatic organisms	
96 hr LC50 (channel catfish):	114 mg/L
96 hr LC50 (bluegill sunfish):	10 ug/L
96 hr LC50 (rainbow trout):	5.2 ug/L

TERRESTRIAL TOXICITY:

Toxic to bees
Oral LD50 (bee): 22 ng/bee
Oral LD50 (mallard duck): >10,000 mg/kg

For the active Piperonyl butoxide: (1)

AQUATIC TOXICITY:

Very toxic to aquatic organisms
24 hr LC50 (carp): 5.3 mg/L

TERRESTRIAL TOXICITY:

Not toxic to bees
Oral LD50 (starlings): >100 mg/kg

13. DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority.

14. TRANSPORT INFORMATION

Road and Rail Transport

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

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

Based on available information, this material is not classified as hazardous according to criteria of NOHSC Australia.

Poisons Schedule (Aust):

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Literary reference

1. In "The Pesticide Manual" Ed. Cd Tomlin. British Crop Protection Council, 1997.

Reason(s) For Issue: Overall Review

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

CONTACT POINTS:

ORGANIZATION	LOCATION	TELEPHONE	ASK FOR
J.C. & A.T. Searle Pty Ltd	Kilcoy	(07) 5497 2022	Technical Officer
Poisons Information Centre	Brisbane QLD	13 11 26	

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