SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name **VECTORFORCE THERMAL FOGGING & ULV INSECTICIDE CONCENTRATE**

Synonym(s) CYPERMTHRIN 25G/L ULTRA LOW VOLUME

1.2 Uses and uses advised against

Use(s) 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)
Flammable Liquids: Category 4
Aspiration Hazard: Category 1
Skin Corrosion/Irritation: Category 2
Specific Target Organ Systemic Toxicity (Single Exposure): Category 3
Aquatic Toxicity (Chronic): Category 1
Serious Eye Damage / Eye Irritation: Category 2A

2.2 Label elements

Signal word **DANGER**

Pictogram(s)



Hazard statement(s)

H227	Combustible liquid.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

Prevention statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s)

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment is advised - see first aid instructions.
P331	Do NOT induce vomiting.
P332 + P337 + P313	If skin or eye irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before re-use.
P370 + P378	In case of fire: Use appropriate media for extinction.
P391	Collect spillage.

Storage statement(s)

P403 + P233 + P235	Store in a well-ventilated place. Keep cool. Keep container tightly closed.
P405	Store locked up.

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
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	64742-94-5	265-198-5	<27%
CYPERMETHRIN	52315-07-8	257-842-9	2.5%
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC (<3% DMSO EXTRACT)	64742-65-0	265-169-7	<70.5%

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. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). 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). If swallowed, do not induce vomiting.

First aid facilities Eye wash facilities should be available.

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/ nitrogen oxides, chlorides, hydrogen cyanide, cyanides, hydrocarbons) when heated to decomposition. May evolve hydrogen fluoride gas 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

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
Store tightly sealed in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should be bunded and have appropriate fire protection and ventilation systems. 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

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Mineral Oil Mist	SWA (AUS)	--	5	--	--

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.
Hands	Wear PVC or rubber gloves.
Body	Wear coveralls and rubber boots and a PVC apron.
Respiratory	Wear a Type A (Organic vapour) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	STRAW COLOURED LIQUID
Odour	CHARACTERISTIC ODOUR
Flammability	CLASS C1 COMBUSTIBLE
Flash point	> 80°C
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Specific gravity	0.87
Solubility (water)	NOT AVAILABLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

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 is not expected to 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), alkalis (e.g. sodium hydroxide), heat and ignition sources.

10.6 Hazardous decomposition products

May evolve toxic gases (carbon/ nitrogen oxides, chlorides, hydrogen cyanide, cyanides, hydrocarbons) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Health hazard summary May be harmful. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation.

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

Inhalation Irritant - toxic. Over exposure may result in mucous membrane irritation of the respiratory tract, coughing and headache. High level exposure may result in CNS stimulation with nervousness, salivation, dizziness, tremors, breathing difficulties (wheezing) and unconsciousness.

Skin Low irritant. Prolonged or repeated contact may result in mild irritation and tingling sensation of the skin. May be absorbed through skin with harmful effects. Dermal LD50 (rabbit) is > 6640 mg/kg.

Ingestion Harmful. Ingestion may result in nausea, vomiting, diarrhoea, salivation, breathing difficulties, hyperexcitability, anxiety, lack of coordination and convulsions. Aspiration or inhalation may cause chemical pneumonitis and pulmonary oedema. Oral LD50 (rat) is > 6640 mg/kg.

Toxicity data

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC (64742-94-5)

LC50 (inhalation)	> 590 mg/m³/4 hours (rat)
LD50 (skin)	> 2 mL/kg (rabbit)
LDLo (ingestion)	5 mL/kg (rat)

CYPERMETHRIN (52315-07-8)

LC50 (inhalation)	7889 mg/m³/4hrs (rat)
LD50 (ingestion)	24750 ug/kg (mouse)
LD50 (intraperitoneal)	25 mg/kg (mouse)
LD50 (skin)	1600 mg/kg (rat)
LDLo (intravenous)	6 mg/kg (rat)

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

No information provided.

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 No information provided

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 5 (S5) 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	R36/37/38	Irritating to eyes, respiratory system and skin.
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	R65	Harmful: May cause lung damage if swallowed.
Safety phrases	S2	Keep out of reach of children.
	S13	Keep away from food, drink and animal feeding stuffs.
	S23	Do not breathe gas/fumes/vapour/spray (where applicable).
	S24/25	Avoid contact with skin and eyes.
	S36/37	Wear suitable protective clothing and gloves.

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
pH	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

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.

Prepared by

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmt.com.au.

Revision: 2
SDS date: 21 January 2015

[End of SDS]