



# SAFETY DATA SHEET

Product Name **CHAINDRITE PROFESSIONAL TIMBER PROTECTION**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Supplier name** SHERWOOD CHEMICALS AUSTRALASIA PTY LTD  
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**Synonym(s)** 0.5 TO 1.5G BIFENTHRIN PER LITRE OF WATER • BIFENTHRIN 100 G/LT EMULSIFIABLE CONCENTRATE  
**Use(s)** INSECTICIDE • TERMICIDE  
**SDS date** 11 February 2015

## 2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

### Risk Phrases

R22 Harmful if swallowed.  
R61 May cause harm to the unborn child.  
R65 Harmful: May cause lung damage if swallowed.

### 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.

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

**UN Number** 3082 **Transport Hazard Class** 9  
**Packing Group** III **Hazchem Code** •3Z

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	CAS Number	EC Number	Content
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	64742-94-5	265-198-5	>60%
BIFENTHRIN	82657-04-3	617-373-6	10%
1-METHYL-2-PYRROLIDONE	872-50-4	212-828-1	5%
EMULSIFIER(S)	-	-	10 to 30%

## 4. 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.

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<b>Skin</b>	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.
<b>Ingestion</b>	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).
<b>Advice to doctor</b>	Treat symptomatically.

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**5. FIRE FIGHTING MEASURES**

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<b>Flammability</b>	Combustible. May evolve toxic gases (carbon oxides, fluorides, chlorides, hydrocarbons) when heated to decomposition.
<b>Fire and explosion</b>	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.
<b>Extinguishing</b>	Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.
<b>Hazchem code</b>	•3Z • Alcohol Resistant Foam is the preferred firefighting medium. Else use; 3 Normal Foam (protein based foam that is not alcohol resistant). Z Wear full fire kit and breathing apparatus. Contain spill and run-off.

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**6. ACCIDENTAL RELEASE MEASURES**

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<b>Personal precautions</b>	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.
<b>Environmental precautions</b>	Prevent product from entering drains and waterways.
<b>Methods of cleaning up</b>	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.
<b>References</b>	See Sections 8 and 13 for exposure controls and disposal.

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**7. STORAGE AND HANDLING**

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<b>Storage</b>	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.
<b>Handling</b>	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.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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**Exposure standards**

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
1-Methyl-2-pyrrolidone	SWA (AUS)	25	103	75	309

**Biological limits** No Biological Limit Value allocated.

Ingredient	Determinant	Sampling Time	BEI
1-METHYL-2-PYRROLIDONE	5-hydroxy-N-methyl-2-pyrrolidone in urine	End of shift	100 mg/L

Reference: ACGIH Biological Exposure Indices

**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. Maintain vapour levels below the recommended exposure standard.

**PPE**

<b>Eye / Face</b>	Wear splash-proof goggles.
<b>Hands</b>	Wear viton (R) or nitrile gloves. If spraying, wear full-length viton (R) or full-length nitrile gloves.
<b>Body</b>	Wear coveralls and rubber boots. If spraying, wear a washable hat.
<b>Respiratory</b>	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.



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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Appearance</b>	PALE TO AMBER COLOURED LIQUID
<b>Odour</b>	CHARACTERISTIC SOLVENT ODOUR
<b>Flammability</b>	CLASS C1 COMBUSTIBLE
<b>Flash point</b>	> 62.5°C
<b>Boiling point</b>	NOT AVAILABLE
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	NOT AVAILABLE
<b>Vapour density</b>	NOT AVAILABLE
<b>Specific gravity</b>	0.91
<b>Solubility (water)</b>	INSOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT AVAILABLE
<b>Lower explosion limit</b>	NOT AVAILABLE
<b>Partition coefficient</b>	NOT AVAILABLE
<b>Autoignition temperature</b>	NOT AVAILABLE
<b>Decomposition temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	NOT AVAILABLE
<b>Explosive properties</b>	NOT AVAILABLE
<b>Oxidising properties</b>	NOT AVAILABLE
<b>Odour threshold</b>	NOT AVAILABLE

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**10. STABILITY AND REACTIVITY**

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<b>Chemical stability</b>	Stable under recommended conditions of storage.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources.
<b>Material to avoid</b>	Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), heat and ignition sources.
<b>Hazardous Decomposition Products</b>	May evolve toxic gases (carbon oxides, fluorides, chlorides, hydrocarbons) when heated to decomposition.
<b>Hazardous Reactions</b>	Polymerization will not occur.

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**11. TOXICOLOGICAL INFORMATION**

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<b>Health Hazard Summary</b>	Toxic. This product has the potential to cause adverse health effects. Use safe work practices to avoid eye or skin contact and inhalation. Upon dilution, the potential for adverse health effects may be reduced. Chronic exposure may result in liver, kidney, blood and central nervous system (CNS) damage. May cause harm to the unborn child.
<b>Eye</b>	Irritant. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged contact.
<b>Inhalation</b>	Irritant. 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. Acute inhalation LC50 = 8.7 mg/L/4 hour
<b>Skin</b>	Irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May be absorbed through skin with harmful effects. The dermal LD50 (rabbit) > 2000 mg/kg

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<b>Ingestion</b>	Harmful. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, fatigue, dizziness and unconsciousness. Harmful. May cause lung damage if swallowed. LD50 (rat) = 540 mg/kg (calculated).
<b>Toxicity data</b>	SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC (64742-94-5) LC50 (inhalation) > 590 mg/m <sup>3</sup> /4 hours (rat) LD50 (skin) > 2 mL/kg (rabbit) LDLo (ingestion) 5 mL/kg (rat)  BIFENTHRIN (82657-04-3) LC50 (inhalation) 4.9 mg/l/4 hours (rat) LD50 (ingestion) 54.5 mg/kg (rat) LD50 (skin) 2 g/kg (rabbit)  1-METHYL-2-PYRROLIDONE (872-50-4) LD50 (ingestion) 3914 mg/kg (rat) LD50 (intraperitoneal) 2742 mg/kg (rat) LD50 (intravenous) 54.5 mg/kg (mouse) LD50 (skin) 8000 mg/kg (rabbit) LD50 (subcutaneous) > 2000 mg/kg (rat)

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**12. ECOLOGICAL INFORMATION**

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<b>Toxicity</b>	The active ingredient, Bifenthrin, is highly toxic to fish and aquatic arthropods with LC50 values ranging from 0.0038 µg/L to 17.8 µg/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin had no effect on molluscs at its limit of water solubility. Bifenthrin is only slightly toxic to both waterfowl and upland game birds with LC50 values range from 1800 mg/kg to > 2,150 mg/kg. Do not contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.
<b>Persistence and degradability</b>	No information provided.
<b>Bioaccumulative potential</b>	No information provided.
<b>Mobility in soil</b>	No information provided.
<b>Other adverse effects</b>	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)].

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**13. DISPOSAL CONSIDERATIONS**

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<b>Waste disposal</b>	Residual product will be disposed of when the container is returned. Contact the manufacturer/supplier for additional information (if required).
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

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**14. TRANSPORT INFORMATION**

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**CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
UN Number	3082	3082	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport Hazard Class	9	9	9
Packing Group	III	III	III

Environmental hazards No information provided

Special precautions for user

Hazchem code •3Z  
 GTEPG 9C1  
 EMS F-A, S-F

## 15. REGULATORY INFORMATION

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

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
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m <sup>3</sup>	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
1.0	Initial SDS Creation

## 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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**End of SDS**