Section 1 – Identification of The Material & Supplier

JH Envirtech Pty Ltd
Suite 40, L2, 89-97 Jones Street,
Ultimo NSW 2007
Tel: 02 9564 2199

Chemical nature: **Synthetic fiber blanket, impregnated with deltamethrin, and contained within polyethylene sheets.**

APVMA Code: **69402/60683**

Trade Name: **JH Termite Barrier (TB)**

Product Use: A termite protection system for the prevention of concealed termite entry into new buildings.

Creation date: **20 February, 2014**

Reviewed: **January, 2017** and valid for 5 years from this date.

Poisons Information Centre: Phone 13 1126 from anywhere in Australia

Section 2 – Hazards Identification

Statement of Hazardous Nature

This product is NOT classified as Hazardous according to the criteria of SWA.
NOT a Dangerous Good according to the Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

SUSMP Classification: Non allocated.

ADG Classification: Non allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

UN Number: None allocated.

GHS Signal word: NONE. Not hazardous.

HAZARD STATEMENT:

H401: Toxic to aquatic life.

PREVENTION:

P102: Keep out of reach of children.
P273: Avoid release to the environment.

RESPONSE:

P352: Wash with plenty of soap and water.
P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog.

STORAGE:

P410: Protect from sunlight.
P402+P404: Store in dry place. Store in closed container.

DISPOSAL:

P501: Dispose of contents and containers as specified on the registered label.

Emergency Overview

Physical Description & colour: White fibre blanket sealed with Green (top) and White (bottom).
Odour: No odour.

Major Health Hazards: Physical signs of deltamethrin toxicity can include dermatitis after skin contact; exposure to sunlight can make it worse. Hazard is considered slight. Swelling of the face and lips can occur. Further symptoms and consequences include; sweating, fever, anxiety and rapid heartbeat.

Section3 – Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m^3)	STEL (mg/M^3)
Deltramethrin	52918-63-5	0.2%	not set	not set
Other non-hazardous ingredients		to 100	not set	not sage

The SWA TWA exposure is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure level that may be equaled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term “peak” is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4- First Aid Measures

General Information:
You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 11 26 from anywhere in Australia and is available at all times. Have this SDS with you when you call.
Inhalation: First aid is not generally required. If in doubt, count a Poisons Information Centre or a doctor.
Skin Contact: Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.
Eye Contact: Quickly and gently brush particles from eyes. No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.
Ingestion: If product is swallowed or gets in mouth, do NOT induce vomiting, wash mouth with water and give some water to drink. If symptoms develop, or in doubt contact a Poisons Information Centre or a doctor.

Section 5 – Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is exposed to fire.
Fire decomposition products from this product may be toxic if inhaled. Appropriate protective measures are to be taken.
Extinguishing Media: In case of fire, use high volume water jet, carbon dioxide, dry chemical, foam, water fog.
Fire Fighting: If fighting fires involving significant quantities of this product, call the fire brigade.

Flash point:	Combustible solid.
Upper Flammability Limit:	No data.
Lower Flammability Limit:	No data.
Auto-ignition temperature:	No data.
Flammability Class:	Combustible solid.

Section 6 – Accident Release Measures

Accidental release: Not applicable due to product presentation. Does not normally need any special clean-up measures. Collect product into labelled containers for recycling or salvage and dispose of promptly via an approved industrial waste disposal site. Refer to product label for specific instructions. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal.

Section 7 – Handling and Storage

Handling: Keep exposure to this product to a minimum and minimize the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures and make sure these measures are followed. The details below under “Storage” should be followed during the handling in order to minimize risks to persons using the product in the workplace. Also avoid contact or product with incompatible materials listed in section 10.
Storage: Protect product from sunlight. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure the product does not come into contact with substances listed under “Incompatible” in Section 10.Check packaging – there may be further storage instructions on the label.

Section 8 – Exposure Controls and Personal Protection

Do not touch or rub eyes, nose or mouth with hands. Facial kin contact may cause temporary numbness. Wash hands after use.
The following Australian Standards will provide general advice regarding safety clothing and equipment:
Respiratory equipment: AS/NZS 1715, Protective Gloves: **AS 2161**, Industrial Clothing: **AS 2919**, Industrial Eye Protection: **AS 1336 and AS 1337**, Occupational footwear: **AS/NZS 2210**.

SWA Exposure Limits	**TWA (mg/m^3)**	**STEL (mg/m^3)**

Exposure limits have not been established by SWA for any of the significant ingredients in this product.

The ADI for Deltamethrin is at 0.01 m/kg/day. The corresponding NOEL is set at 1 mg/kg/day. ADI means Acceptable Dailey Intake. NOEL means No-observable-effect-level. Data from Australian ADI List. June 2014.
No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.
Ventilation: This product should be used in a well ventilated area. If natural ventilation is inadequate, use, of a fan is suggested.
Eye Protection: Not usually required.
Skin Protection: Not usually required.
Respirator: Not usually required.

Section 9 – Physical and Chemical Properties

Physical Description & colour: White fibre blanket with plastic membrane top (Green) and bottom (White).
Odour: No odour.

Boiling Point:	Not available.
Freezing/Melting point:	No specific data. Solid at normal temperatures.
Vapor Pressure:	Nil at normal ambient temperatures.
Vapor Density:	Not applicable.
Specific gravity:	No data.
Water Solubility:	Not soluble in water.
pH:	Normally about pH 6-7.(expected to be neutral)
Volatility:	Nil at normal ambient temperatures.
Odor Theshhold:	No data.
Evaporation Rate:	Not applicable.
Coeff Oil/water distribution:	No data.
Viscosity:	Not applicable.
Auto-ignition temp:	No data.

Section 10 – Stability and Reactivity

Reactivity: This product is unlikely to react decompose under normal storage conditions. However if you have any doubts, contact the supplier for advise on shelf life properties.
Conditions to avoid: Store out of sunlight. Avoid extreme heat. Store in closed original container in dry, cool, well ventilated area out of direct sunlight.
Incompatibilities: Strong oxidizing agents.
Fire decomposition: Combustion forms carbon dioxide and if incomplete, carbon monoxide and possibly smoke. Water is also formed. Carbon Monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbances of judgment and unconsciousness followed by coma and death.
Polymerisation: This product will not undergo polymerisation reactions.

Section 11 – Toxicological and Information

Acute Toxicity:
The acute oral LD_{50} for deltamethrin in male rats typically ranged from 128 mg/kg to greater than 5,000 mg/kg depending on the carrier and conditions of the study, the LD_{50} for female rats was 52mg/kg and other published values range from 31 to 19 mg/kg. Values ranging from 21to 34 mg/kg were obtained for mice, while dogs had a reported LD_{50} of 300 mg/kg. The acute percutaneous LD_{50} for rats was reported to be greater than 2,000 mg/kg; greater than 10,000 mg/kg for quail; and greater than 4,640 mg/kg for ducks. The acute dermal LD_{50} for rabbits was greater than 2,000 mg/kg. No skin irritation and slight eye irritation were reported.
Chronic Toxicity: Workers exposed to technical grade deltamethrin during its manufacture over 7-8 years experienced transient skin and mucous membrane irritation, which could be prevented by use of gloves and face masks. No other ill effects were seen.
Reproductive effects: A reproductive 3-generation study in rats reported a reproductive NOEL to be greater than 2.5 mg/kg/day. Level tested were 0, 0.1, 1, and 2.5 mg/kg/day. Oral administration of deltamethrin to mice on days 7 to 16 days of gestation produced a dosage-related reduction of weight gain but not effect on the number of implants, fetal mortality, fetal weight or malformation.

Teratogenic Effects: No reported teratogenic effects in mice, rats and rabbits. No teratogenic activity.
Mutagenic Effects: No mutagenic effects in mice, rats and rabbits. Deltamethrin does not have mutagenic activity.
Carcinogenic Effects: No reported carcinogenic effects.
Organ Toxicity: Deltamethrin is hydrolyzed by liver micromal enzymes to 3-(2.2dibromovinyl) 2.2-cyclopropane carboxylic acid and 3-phenoxybenalehyde.

Classification of Hazardous Ingredients

Ingredient Risk Phases
No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.
There is no data to hand indicating any particular target organs.

Potential Health Effects

Inhalation:
Short term exposure: Slight inhalation exposure is considered to be unlikely. Available data indicates that this product is not harmful.
Long term exposure: No data for health effects associated with long term inhalation.
Skin Contact:
Short term exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be irritating, but is unlikely to cause anything more than transient discomfort.
Long term exposure: No data for health effects associated with long term skin exposure.
Eye Contact:
Short term exposure: This product may be irritating to eyes, but unlikely to cause more than transient discomfort.
Long term exposure: No data for health effects associated with long term eye exposure.
Ingestion:
Short term exposure: Significant oral exposure is considered to be unlikely. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.
Long term exposure: No data for health effects associated with long term ingestion.
Carcinogen Status:
SWA: No significant ingredient is classified as carcinogenic by SWA.
NTP: No significant ingredient is classified as carcinogenic by NTP.
IARC: Deltamethrin is Class 3- unclassifiable as to carcinogenicity to humans.
See the IARC website for further details. A web address has not been provided as addresses frequently change.

Section 12 – Ecological Information

Toxic to aquatic organisms, may cause long term adverse effects to the aquatic environment. This product is not biodegradable.
Effects on Birds: The reported 8-day LD_{50} on deltamethrin for ducks was greater than 4,640 mg/kg/day diet; and greater than 10,000 mg/kg/day diet for quail.
Effects on Aquatic Organisms: As is common with all pyrethroids, deltamethrin has a high toxicity to fish under laboratory conditions. However, in the field under normal conditions of use, fish are not harmed. Deltamethrin had an impact on aquatic herbivorous insects. This impact led to an increase of algae. Although the fish (fathead minnows) accumulated the deltamethrin, no mortality could be observed. In laboratory trials, the LD_{50} for fish was 1-10 micrograms/L.
Effects on Other Animals (Non-target species): Deltamethrin is considered toxic to bees. Deltramethrin is very toxic over long periods to the predatory mite Typhodromum pyri. The parasitic wasp Encarsia Formosa, released in greenhouses to combat whitefly, is too sensitive to allow a treatment with deltramethrin against excessive outbreaks of whiteflies. Deltramethrin had little or no effect on adults or cocoons of Apanteles plutellae, a parasite of the diamond back moth in India. Spiders were also indicated to be strongly affected in field investigations.
ENVIRONMENTAL FATE:
Breakdown of Chemical in Soil and Groundwater: Degradation **o**ccurs within 1-2 weeks in direct contact with soil.

Breakdown of Chemical in Surface Water: Deltamethrin in pond water was rapidly absorbed, mostly by sediment, in addition to uptake by plants and evaporation into the air.
Breakdown of Chemical in Vegetation: About 10 days after use, there are no deltamethin residues observed on plants, there is no known phytotoxicity to crops.

Section 13 – Disposal Considerations

Disposal: Dispose of unused off-cuts by laying over the JH Termite Barrier at an installation site and cover with concrete slab or place in cavity wall. If this is not possible, off-cuts should be placed in a sealed bag and disposed of via an approved industrial waste disposal site. Puncture and deliver empty packaging to an approved waste management facility in compliance with local, state or territory government regulations. Do not burn empty containers or product.

Section 14 – Transport Information

ADG Code: This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria.. Not necessary to transport the product with special conditions unless required by other regulations.

Section 15 – Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations. The following ingredient: Deltamethriin, is mentioned in the SUSMP.

Section 16 – Other Information

This SDS contains only safety-related information. For other data read product literature.
If there is any conflict between this SDS and the registered label, instructions on the label prevail.

Acronyms:

ADG Code:	Australian Code for the Transport of Dangerous Goods by Road and Rails.
AICS:	Australian Inventory of Chemical Substance.
SWA:	Safe Work Australia, formerly ASCC and NOHSC.
CAS Number:	Chemical Abstracts Service Registry Number.
Hazchem Code:	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters.
IARC:	International Agency Research on Cancer.
NOS:	Not otherwise specified.
NTP:	National Toxicology Program (USA).
R-Phrase:	Risk phrase.
SUSMP:	Standard for the Uniform Scheduling of Drugs & Poisons.
UN Number:	United Nations Number.

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.
IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT JH ENVIRTECH PTY LTD SO THAT WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS AVAILABLE ON REQUEST.

Please read all labels carefully before using product.