

SAFETY DATA SHEET



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Date of Issue: Jan 2019
SDS No. TS008

Product Name: TERM-seal Ura-Fen Major Termite Barrier Part A

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name	TERM-seal (AUST) Pty Ltd.
Address	1/30 Janola Cct, Port Macquarie, NSW, 2444
Telephone	1300 657 822
Fax	
Emergency	13 11 26
Synonym(s)	None
Uses	Flexible polyurethane foam barrier to termite entry. Two component kit. Part A (Isocyanate)
SDS Date	November 2016 (Updated to GHS)

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Globally Harmonised System (GHS) classification of the substance/mixture:

Specific Target Organ Toxicity (Single Exposure): Hazard Category 3.

Sensitization - Respiratory: Hazard Category 1, 1A, 1B.

Acute Toxicity – Inhalation: Hazard Category 4.

Skin Corrosion/Irritation – Hazard Category 2.

Sensitization - Skin: Hazard Category 1, 1A, 1B.

Eye Damage/Irritation – Hazard Category 2B.

Signal Word: DANGER.

Hazard statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H320 Causes eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

Precautionary Statements:

Prevention:

P261 Avoid breathing vapours.

P264 Wash hands, arms and face thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

2. HAZARDS IDENTIFICATION (Continued)

Prevention (Continued):

P285 In case of inadequate ventilation wear respiratory protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P304 + P341 IF INHALED: If breathing is difficult, remove victim 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 see Safety Directions on product label.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P362 Take off contaminated clothing and Wash before reuse.

P363 Wash contaminated clothing before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with national regulations.

Pictograms:



3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Content
4,4'-Diphenylmethane diisocyanate (MDI) isomers and homologues	101-68-8	> 60%

4. FIRST AID MEASURES

Eye	Hold eyes open and flush immediately with large amounts of water. Obtain immediate medical attention.
Inhalation	If breathing difficulty is experienced increase ventilation or move exposed person to fresh air. If necessary, provide oxygen or artificial respiration by trained personnel and seek medical attention.
Ingestion	If swallowed, do not induce vomiting. Seek immediate medical attention. Rinse mouth with water (do not swallow). Give nothing by mouth.

4. FIRST AID MEASURES (Continued)

Advice to Doctor

Treat symptomatically. May cause respiratory sensitisation or asthma-like symptoms. Bronchodilators, expectorants, and anti-tussives may be of help. Excessive exposure may aggravate pre-existing asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airway dysfunction syndrome). Treat bronchospasm with inhaled beta 2 agonist and oral or parenteral corticosteroids. Respiratory symptoms, including pulmonary oedema, may be delayed. Persons receiving significant exposure should be observed for 24-48 hours for signs of respiratory distress. Maintain adequate ventilation and oxygenation of the patient. Although cholinesterase depression has been reported with this material, it is not of benefit in determining exposure and need not be considered in the treatment of persons exposed to the material. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. In case of poisoning, contact Poisons Information Centre Tel: 13 11 26.

5. FIRE FIGHTING MEASURES**Flammability**

C2 Combustible liquid.

Fire and Explosion

Decomposes on heating emitting toxic fumes including oxides of carbon and nitrogen, and hydrogen cyanide. During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Contamination of isocyanates with water could lead to dangerous pressure inside closed containers by generation of carbon dioxide. Containers may burst if overheated.

Extinguishing Media

Use carbon dioxide; dry chemical; protein-based foam; or alcohol-resistant foam. If water is to be used, it must be sprayed only in large quantities (see Section 10 - Stability and Reactivity).

Hazchem Code

None allocated.

6. ACCIDENTAL RELEASE MEASURES**Spillage**

Minor Spill:

Avoid contact with spilled material. Remove non-emergency personnel from area. Keep upwind of spill. Ventilate area. Use appropriate personal protective equipment (refer to Section 8 - Exposure Controls / Personal Protection). Contain liquid to prevent contamination of soil, surface water or ground water. Prevent spilled material from entering, sewers or drains. Contain and cover the spillage with decontaminant, wet earth or wet sand and leave to react for at least 30 minutes. Collect material in suitable and properly labelled open-top containers and remove for further decontamination if necessary.

DO NOT place in sealed container. Prolonged contact with water results in a chemical reaction, which may result in rupture of the container due to generation of carbon dioxide gas. Remove to a well ventilated area. Clean up floor areas. Wash area well with water. Decontaminant solution: sodium carbonate 5-10%; liquid detergent 0.2-2%; water to 100%

7. STORAGE AND HANDLING**Storage**

Handling

Keep product away from moisture at all times. Keep containers closed when not in use. Store in a dry, cool place out of direct sunlight. Storage above 33°C will shorten the shelf life. Protect from freezing. Storage below 13°C may affect foam quality if chemicals are not warmed to room temperature before using.

Use in a well-ventilated area. Avoid all skin and eye contact. Read the product label before use. Always wash hands before eating, smoking or using the toilet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards

No exposure standards have been established for this product; however, the following exposure standards have been assigned by NOHSC to the following components of the product:
Diphenylmethane diisocyanate (MDI) Isomers and Homologues (as - NCO): [TWA] 0.02 mg/m³; [STEL] 0.07 mg/m³

Biological Limits

None allocated

Engineering Controls

Natural ventilation is adequate under normal conditions of use. If the product is used in confined spaces, use exhaust ventilation and ensure the air flow is away from the person handling the product. Keep containers closed when not in use.

PPE

CLOTHING: Wear suitable protective clothing to prevent skin contact - overalls, boots, and apron. Suitable materials include butyl rubber, neoprene, nitrile/butadiene rubber, laminated polyethylene.

GLOVES: Wear chemical-resistant gloves to prevent skin contact. Preferred glove barrier materials include butyl rubber, chlorinated polyethylene, polyethylene, or ethyl vinyl alcohol laminate (EVAL). Acceptable glove barrier materials include natural rubber (latex), neoprene, NBR, PVC or viton.

EYES: Wear safety glasses with side shields, chemical goggles or face shield.

RESPIRATORY PROTECTION: Avoid breathing vapours/gases. Atmospheric levels should be maintained below the exposure standard. When atmospheric levels may exceed the exposure standard, use an approved air-purifying respirator equipped with an organic vapour sorbent and a particulate filter. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive pressure air-supplying respirator (airline or SCBA). Avoid breathing gases. Use respirators in accordance with AS/NZS1715/1716. When gases exceed the exposure standards use a supplied air respirator in accordance with AS/NZS1715.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dark amber, viscous liquid	Evaporation Rate	Not applicable
Odour	Characteristic	Solubility (water)	Not soluble
pH (neat)	Not applicable	% Volatiles	Not determined
Vapour Pressure	<0.00001mmHg @ 20°C	Flammability	Combustible
Vapour Density	Not applicable	Flash Point	>200°C
Boiling Point	>200°C	Upper Explosion Limit	Not applicable
Specific Gravity	1.2 approx	Lower Explosion Limit	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions of use.
Conditions to Avoid	High temperatures will raise the pressure in the containers which may lead to rupturing.
Material to Avoid	Acids, alcohols, amines, bases, strong oxidising agents, water, galvanised metals, and copper and its alloys
Decomposition	May give off toxic fumes of carbon monoxide, carbon dioxide and hydrogen cyanide when heated to decomposition.
Hazardous Reactions	Product reacts with water liberating carbon dioxide which can lead to excessive pressure in closed containers and may form insoluble solids that block pipes, valves, etc. Hazardous polymerisation can occur. It is catalysed by strong bases and water. Can react at temperatures above 160°C. Products based on diisocyanates react with many materials such as bases, ammonia, primary and secondary amines, alcohols, water and acids generating heat. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of reaction partners is good, or is supported by stirring or the presence of solvents. Products based on diisocyanates are insoluble in, and denser than, water and sink to the bottom, but react slowly at the interface. A solid water-insoluble layer of polyurea is formed and carbon dioxide gas is liberated.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	No adverse health effects expected if this product is handled in accordance with this Safety Data Sheet and the product label.
Eye	May be irritating to eyes. MDI contact can cause physical damage due to adhesive character
Inhalation	Harmful if inhaled. Vapour and aerosol can cause severe irritation of the upper respiratory tract including burning sensation in nose and throat. High levels of exposure may cause inflammation of lung tissue and fluid in the lungs. In hypersensitive individuals very low concentrations may lead to asthma-like symptoms. Effects may be delayed. May cause sensitisation by inhalation.
Skin	May cause slight to moderate irritation. May stain skin. May cause sensitisation by skin contact. Animal studies suggest skin contact may play a role in respiratory sensitisation.
Ingestion	Not a likely route of exposure. May cause irritation of mucous membranes in the mouth and digestive tract.
Toxicity Data	LD ₅₀ (oral, rat) >2000mg/kg; LD ₅₀ (dermal, rabbit) >2000mg/kg; LC ₅₀ (inhalation, rat, 4 hr) = 490mg/m ³ (experimentally produced aerosol with an aerodynamic diameter <5µm). No evidence of teratogenicity. Industrial experience in humans has not shown any links between NDI-based products and the development of cancer.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Mobility

The measured ecotoxicity is that of the hydrolysed product generally under conditions maximising production of soluble species. Material is not expected to be toxic to aquatic organisms on an acute basis ($LC_{50}/EC_{50} > 100\text{mg/L}$ for the most sensitive species). $LC_{50} > 1000\text{mg/kg}$ for earthworm (*Eisenia foetida*). In the aquatic and terrestrial environment, movement is limited by the reactivity of the product with water which results in formation of predominantly insoluble polyureas. No appreciable volatilisation from water to air is expected.

Persistence and degradability

In the aquatic and terrestrial environment, the product reacts with water to form predominantly insoluble polyureas which appear to be stable. In the atmospheric environment material is expected to have a short half life based on calculations and by analogy with related diisocyanates.

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Do not allow product to enter sewers, drains, natural waterways or the ground. The preferred waste management option for unused material is to send to an approved recycler or incinerator. The same waste management options are recommended for contaminated material, although additional evaluation may be required.

Legislation

Dispose of in accordance with relevant state, federal and/or local legislation. Clean containers can be sent for recycling.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Shipping Name	None allocated	DG Class	None allocated	Subsidiary Risk(s)	None allocated
UN No.	None allocated	Hazchem Code	None allocated	EPG	None allocated

15. REGULATORY INFORMATION

Poison Schedule
AICS

S6
All ingredients are listed on the Australian Inventory of Chemical Substances (AICS).

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. **63002/44508**.

16. OTHER INFORMATION

Additional Information

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, control measures, protective equipment used and method of application. It is impractical to prepare a Safety Data Sheet that encompasses all possible scenarios, therefore it is

anticipated that users will assess the risks and apply appropriate control methods.

16. OTHER INFORMATION (Continued)

Issue Date: 7th Jan 2019. Valid for 5 years till 7th January 2024. (Revised to GHS).

Key to abbreviations and acronyms used in this SDS:

ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
Carcinogen: An agent which is responsible for the formation of a cancer.
Clonic: Alternate involuntary muscular contraction and relaxation in rapid succession.
Genotoxic: Capable of causing damage to genetic material, such as DNA.
Lavage: The irrigation or washing out of an organ, as of the stomach or bowel.
Mutagen: An agent capable of producing a mutation.
Oedema: Accumulation of fluid in tissues.
Teratogen: An agent capable of causing abnormalities in a developing foetus.
Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

References

1. "Search Hazardous Substances". Safe Work Australia website. (2016).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

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 should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

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

End SDS