

MATERIAL SAFETY DATA SHEET

SANAFOAM VAPOROOTER II – Part A Metham Sodium & Part B Dichlobenil

Date of Issue: 12 January 2007

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **SANAFOAM VAPOROOTER II**
Foaming Root Inhibitor
Consists of Part A Metham Sodium & Part B Dichlobenil

Other Names: None

Product Code: None

Recommended Use: For the prevention of growth of roots in sewers.
Part A and Part B to be used in combination.

Supplier: Drainchem Pty Ltd

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2. HAZARDS IDENTIFICATION

Hazard Classification: **HAZARDOUS SUBSTANCE - DANGEROUS GOOD**

Risk Phrases:

R34	Causes burns
R21/22	Harmful in contact with skin and if swallowed
R31	Contact with acids liberates toxic gas
R43	May cause sensitisation by skin contact

Safety Phrases:

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label wherever possible).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Proportion:
<i>Part A:</i>		
Metham Sodium	137-42-8	High
Foaming Agent	-	Med
Water	7732-18-5	High
		Part A Total = 100%

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Ingredients:	CAS Number:	Proportion:
<i>Part B:</i>		High
Dichlobenil	1194-65-6	High
Other non-hazardous substances		High
		Part B Total = 100%

VHigh > 60%, High 30-60%, Med 10-29%, Low < 10% (w/w)

4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 03 474 7000.

Ingestion: If conscious, immediately rinse mouth with water. Give plenty of water to drink. Avoid giving alcohol. Never give anything by mouth to an unconscious patient. Seek immediate medical assistance.

Eye Contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Skin Contact: Immediately wash contaminated skin with plenty of water. Remove contaminated clothing and was before re-use. If swelling, redness, blistering or irritation occurs seek medical attention.

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through a face mask. If breathing has stopped, apply artificial respiration at once. In event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

First Aid Facilities: Provide washing facilities, such as eye wash station and emergency shower, in the workplace.

Medical Attention: Poisonings by ingestion of metham sodium have not been reported, however if a large amount has been ingested recently, empty the stomach by gastric intubation, aspiration and lavage, after taking all precautions to protect the airways. Instil activated charcoal. Also give cathartic unless diarrhoea has already commenced. If pulmonary irritation or oedema occur as a result of inhaling methylisothiocyanate, transport the victim promptly to a medical facility.

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Aggravated Medical Conditions Caused by Exposure: None known.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Dry agent (such as carbon dioxide or dry chemical powder), foam, water fog

Hazards from Combustion Products:

Part A:
Non combustible material.
Following evaporation of aqueous component, residual material may burn. Decomposes on heating, emitting toxic fumes including those of hydrogen sulphide.

Part B:
Combustible solid. Nitrogen and carbon oxides may be formed. Do not breathe fumes.

Special Protective Precautions and Equipment for Fire Fighters: Fire fighters to wear self-contained breathing apparatus (AS1716:2000) if risk of exposure to products of combustion and decomposition.
Do not release contaminated water into the environment.

Hazchem Code: 2X

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Wear protective equipment to prevent skin and eye contamination and inhalation of vapours.
Do not smoke, eat or drink during clean up operation.

Methods and Materials for Containment and Clean Up Procedures:

Contain – prevent contamination of drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers for disposal at an approved local waste disposal site.

On completion of clean up, remove and wash all protective clothing and equipment with detergent and water. Any heavily contaminated clothing should be placed in a plastic garbage bag and placed in a sealable drum and disposed with contaminated absorbent.

If contamination of crops or waterways has occurred, advise emergency services or State Department of Agriculture/Primary Industries.

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7. HANDLING AND STORAGE

Precautions for Safe Handling:	Keep out of reach of children. This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.
Conditions for Safe Storage, including any Incompatibilities:	Store in the closed, original container in a cool, well-ventilated place and out of direct sunlight. Store away from foodstuffs and sources of heat or ignition. Keep containers closed at all times - check regularly for spills.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:	No exposure standards have been assigned by NOHSC for this specific material.
Biological Limit Values:	No biological limit allocated.
Engineering Controls:	Use in well ventilated area. Use with local exhaust ventilation or while wearing organic vapour respirator or air supplied mask. Keep containers closed when not in use.
Personal Protective Equipment (PPE):	OVERALLS, RUBBER BOOTS, FACE SHIELD OR AIR MASK, GLOVES (Long) APRON. Avoid skin and eye contact and inhalation of vapour from decomposition or spray mist. When opening, mixing and using product, wear cotton overalls buttoned to the neck and wrist, a washable hat, apron (chemical resistant), elbow-length (nitrile, neoprene) gloves, chemical resistant footwear, a full facepiece respirator with organic vapour/gas cartridge or canister meeting the requirements of AS/NZS 1715 and AS/NZS 1716; or goggles and half facepiece respirator with organic vapour cartridge or canister meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Leather gloves, boots or other garments should not be used. Contaminated leather cannot be cleaned and should be discarded. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Part A	Part B
Active Ingredient:	Metham Sodium	Dichlobenil
Appearance:	Light green to yellow liquid	Off-white powder
Odour:	Sulfur-like odour	Aromatic odour
pH:	9.0 -10.5	Not applicable
Vapour Pressure:	Not applicable	0.888 pa @ 20 ⁰ C for active ingredient
Vapour Density:	Not available	Not available
Boiling Point:	82-100 ⁰ C	82-100 ⁰ C
Melting Point:	Not available	Not available
Solubility:	Miscible with water	Not available
Specific Gravity:	1.13 @ 20 ⁰ C	Not applicable
Flash Point:	Not available	Not available
Flammability (explosive) Limits:	Not available	Not available
Auto-Ignition Temperature:	Not available	Not available
Octanol/Water Partition Coefficient:	Not available	Not available
Evaporation Rate:	Not available	Not available
Viscosity:	Not available	Not available
Decomposition Temperature:	Not available	Not available

10. STABILITY AND REACTIVITY

Chemical Stability:	Metham sodium solution corrodes copper, zinc and their alloys. On contact with ordinary steel, it rapidly forms a black precipitate. Reacts with acids to evolve hydrogen sulphide and methylisothiocyanate. Decomposes on significant dilution in water or heating to form methylisothiocyanate.
Conditions to Avoid:	Keep away from sources of ignition.
Incompatible Materials:	Avoid copper, zinc and their alloys. Avoid acids.
Hazardous Decomposition Products:	Decomposes on heating, emitting toxic fumes including those of hydrogen sulphide. Nitrogen and carbon oxides may also be formed on heating.
Hazardous Reactions:	Hazardous polymerisation will not occur.

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11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Material Safety Data Sheet (MSDS) and the product label.

Health Effects from Likely Routes of Exposure if the product is mishandled and overexposure occurs:

Ingestion: Swallowing can result in nausea, vomiting, diarrhea, abdominal pain, chemical burns, sleepiness, cardiac and respiratory disorders, renal lesions and shock. Effects may be worse where the consumption of alcohol is also involved.

Eye Contact: Corrosive to eyes; contact can cause corneal burns. Contamination of the eyes can result in permanent injury. May cause watering eyes, conjunctivitis and blepharospasm.

Skin Contact: Contact with the skin will result in moderate irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to allergic contact dermatitis. A skin sensitiser. Effects may be delayed. Can be absorbed through the skin, effects as indicated under "Ingestion".

Inhalation: Slightly toxic by inhalation. The product decomposes on dilution in water to produce hydrogen sulphide and methylisothiocyanate vapour which is an irritant to mucous membranes and respiratory tract. May cause congestion, hoarseness, cough and throat pain.

Long Term Effects: No information available.

Acute / Chronic Animal Toxicity Data:

Product:	No toxicity data available for the final product.	
Individual Ingredients:	Following toxicity data for the active ingredient Metham Sodium in Part A:	Following toxicity data for the active ingredient Dichlobenil in Part B:
Oral Toxicity:	LD ₅₀ rat: 896 mg/kg	LD ₅₀ rat: > 1166 mg/kg
Dermal Toxicity:	LD ₅₀ rat: > 2,000 mg/kg	LD ₅₀ rat: > 2,000 mg/kg
Inhalation Toxicity:	LC ₅₀ rat: > 26 ppm (8 hours)	LC ₅₀ rat: > 3.3 mg/L (4 hours)
Eye Irritation:	Irritant to rabbit eyes	Slight irritant to rabbit eyes

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Skin Irritation:	Corrosive to rabbit skin	Slight irritant to rabbit skin
Sensitisation:	Sensitises rabbit skin	Non-sensitising to rabbit skin
<u>Chronic:</u>	No data available	In a 2 year feeding study with Dichlobenil in male and female dogs (at doses up to 8.75 mg/kg/day), increased liver and thyroid weights and other physiological changes were reported at the highest dose tested.

12. ECOLOGICAL INFORMATION

<u>Ecotoxicity:</u>	Dangerous to aquatic organisms. DO NOT contaminate streams, rivers or waterways with the product or used containers.	
Product:	No data available for the final product	
Individual Ingredients:	Following ecotoxicity data for the active ingredient Metham Sodium in Part A:	Following ecotoxicity data for the active ingredient Dichlobenil in Part B
Fish Toxicity:	Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment. LC ₅₀ (96 h): 35.2 mg/L rainbow trout NOEC (96 h): 0.464 mg/L rainbow trout	Moderately toxic to fish and aquatic invertebrates. LC ₅₀ (96 h): 7.8 mg/L bluegill sunfish LC ₅₀ (96 h): 8.38 mg/L rainbow trout
Daphnia Toxicity:	LC ₅₀ (48 h): 2.34 mg/L <i>Daphnia magna</i> NOEC (48 h): 0.976 mg/L <i>Daphnia magna</i>	LC ₅₀ (48 h): 6.2 mg/L <i>Daphnia magna</i>
Toxicity to Algae:	Not available	Not available
Bird Toxicity:	LC ₅₀ (5 day): > 5,000 mg/kg diet for mallard ducks & Japanese quail	Not available
Bee Toxicity:	Non-toxic to bees when used as directed	Not available

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<u>Persistence and Degradability:</u>	In soil, metham sodium rapidly decomposes to methyl isothiocyanate, which is volatile and quickly evaporates.	Not available
<u>Mobility:</u>	Not available	Not available

13. DISPOSAL CONSIDERATIONS

Disposal Methods:	Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.
Special Precautions for Landfill or Incineration:	If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for the purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

UN Number:	3267
UN Proper Shipping Name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Metham Sodium)
Class and Subsidiary Risk:	8
Packing Group:	III
Special Precautions for User:	None
Hazchem Code:	2X
Material For Export:	<i>Marine Transport</i> – Classified as Class 8 Marine Pollutant by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea <i>Air Transport</i> – Classified as Class 8 by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air

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15. REGULATORY INFORMATION

SUSDP:	Schedule 6
APVMA:	Registered according to the Agricultural and Veterinary Chemicals Act 1988. Not to be sold separately to Part B. APVMA Product Number: 51811
International Regulatory Information:	No information available.

16. OTHER INFORMATION

Date of Preparation or Revision: 12 January 2007.
Replaces version dated 15 June 2005.
Reason for Update: Update to Hazards Identification and Dangerous Goods details and separation of details for both Parts A & B.

Data Sources: Prepared by Drainchem Pty Ltd
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MSDS's are updated frequently. Please ensure you have a current copy.

Abbreviations and Acronyms:
APVMA: Australian Pesticides and Veterinary Medicines Authority
NOHSC: National Occupational Health & Safety Commission
SUSDP: Standard for the Uniform Scheduling of Drugs and Poisons

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Drainchem Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

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

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

END OF MSDS