

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

Metham

Soil Fumigant

ACTIVE CONSTITUENT: 423 g/L METHAM
present as the **SODIUM SALT**

Pre-planting treatment for control of soil-borne pests as per the Directions For Use Table.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.


APVMA Approval No.: 65891/53397

Contents: 200L, 1000L



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IN A TRANSPORT EMERGENCY
DIAL 000
POLICE OR FIRE BRIGADE



UN NO 3267
CORROSIVE LIQUID,
BASIC, ORGANIC N.O.S.
(METHAM SODIUM)
HAZCHEM: 2X
PACKAGING GROUP: III

DIRECTIONS FOR USE

RESTRAINTS: DO NOT apply to dry soil.
 DO NOT exceed specified rates.
 DO NOT use in high winds.
 DO NOT apply in low humidity or when temperature is above 32°C

SITUATION	PEST CONTROLLED	STATE	RATE	CRITICAL COMMENTS
Sites for seedbeds, Lawns & other limited areas	Germinating Weed Seeds including Winter Grass, Prince of Wales Feather, Fat Hen, Nematodes, Symphylids (Not Tas.) (Garden Centipede),	ALL STATES	25-50L per 50L water per 1000m ²	SOIL INJECTIONS: Use the higher rate for heavier soils. Injection points or injection nozzles under a blade should be 12cm apart, 10-15cm deep in a well prepared moist soil. Immediately after injection, compact the soil by rolling. Water lightly to prevent escape of gas. Repeat irrigation after 2-3 days for light soils or soils which crack or dry out quickly. Prevent run-off.
			1.1L per 12L water per 10m ²	ROTARY TILLER: Spray or sprinkle diluted solution in front of tiller. Roll immediately to compact soil. Lightly water as above.
Field: Application to Total Area	Fungus Diseases Including Rhizoctonia, Pythium, Fusarium, Phytophthora, Verticillium, Sclerotinia and Club Root of Crucifers	QLD, NSW, VIC, SA, WA only	250-500L per 400-700L water per ha	SOIL INJECTION: Use the higher rate for heavier soils. Follow method for injection described under seedbeds.
			600-800L per 900-1100L water per ha	APPROVED ONLY FOR TRICKLE IRRIGATION SYSTEMS designed to apply agricultural chemicals as certified by the manufacturer and under plastic sheeting. Use the higher rate for heavier soils. Use system to give large droplet size. For shallow pests in the top 30cm or less of soil - run system for 5-10 minutes. For next 10-20 minutes inject solution into irrigation system and continue watering until soil is wet as deep as control is needed. Keep moist for 2-3 days for light soils or soils which crack or dry out quickly. For control deeper than 45cm divide recommended dose into three equal parts and apply at intervals during irrigation period.
			250-500L per 400-700L water per ha	ROTARY TILLER: Spray or sprinkle diluted solution in front of tiller. Roll immediately to compact soil. Irrigate at once with enough water to seal the soil surface. Repeat irrigation after 2-3 days for light soils or soils that crack or dry out quickly.
Field: Application to Beds or Rows		ALL STATES	250-500L per 400-700L water per ha	SOIL INJECTION: Use the higher rate for heavier soils. Solution may be injected into pre-formed beds or as a band treatment. Follow the instructions for injection above. For a wider treated band space use two or more injection points at intervals of 12cm apart. All methods should be at a depth of 10-15cm.
			400-800L per 700-1000L water per ha	BEDS – SOIL COVERING METHOD: Use the higher rate for heavier soils. Inject or drip into moist soil directly ahead of the bed shaper. Use sufficient water to ensure uniform application. Cover with 7-15cm of moist soil. Immediately roll to compact soil.
			250-500L per 400-700L water per ha	ROTARY TILLER: Spray or sprinkle diluted solution in front of tiller. Roll immediately to compact soil. Irrigate at once with enough water to seal the soil surface. Repeat irrigation after 2-3 days for light soils that crack or dry out quickly.
Field: Application to Bed or Rows	Germinating Weed Seeds including Winter Grass, Prince of Wales Feather, Fat Hen, Nematodes, Symphylids (Not Tas.) (Garden Centipede) Fungus Diseases Including Rhizoctonia, Pythium, Fusarium, Phytophthora, Verticillium, Sclerotinia and Club Root of Crucifers	QLD only	250-800L per treated ha	TRICKLE IRRIGATION: Use the higher rate for heavier soils. 5-8 weeks prior to planting soil must be bed-formed with trickle tape and plastic mulch. Thoroughly wet soil to allow weed seed to germinate. Apply TITAN Metham Soil Fumigant to moist soil by injecting into mainline using a suitable pump sufficient to wet entire root zone. Use a longer injection period for heavier soils. Flush all lines and equipment with clean water after use. Puncture plastic 2 weeks after treatment to allow dissipation of TITAN Metham Soil Fumigant. Heavy nematode infestation may require further treatment prior to second crop. ENSURE INJECTION CAPACITY CAN HANDLE LARGE RATES OR USE SPLIT APPLICATIONS.
Potting Soil	Fungus Diseases Including Rhizoctonia, Pythium, Fusarium, Phytophthora, Verticillium, Sclerotinia and Club Root of Crucifers	ALL STATES	600mL per m ³ soil mixture	CEMENT MIXER: Mix moist soil thoroughly, adding TITAN Metham Soil Fumigant to lidded mixer in a well ventilated area. Empty soil into a pile and cover with plastic sheeting to keep in gas.
			1.1L per 12L water per 10m ²	ROTARY TILLER METHOD: Spread soil smooth not more than depth of 20cm. Apply TITAN Metham Soil Fumigant over entire surface and till to maximum adjustable depth of tiller. Treat further layers as necessary and seal top layer with water.
Tobacco Plant Bed		QLD, NSW only	9.75L per 700-900L water per 100m ²	TOBACCO SEED BED: Use the higher rate for heavier soils. Apply in Autumn through an approved irrigation system, sprayers or any suitable approved equipment. Follow instructions for seedbeds or plant beds. DO NOT treat tobacco plant beds by hand directed methods.
	Onion Weed	WA only	1.1L per 50L water per 5m ²	SPOT TREATMENT: Spray entire surface area using drenching nozzles.

NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.



PROHIBITIONS: **DO NOT USE BY HAND DIRECTED SPRAYING INCLUDING SPRINKLER CAN.**
DO NOT TREAT POTTING SOIL BY LOOSE MIXED METHOD OR VIA SHREDDER.
DO NOT USE BY FLOOD IRRIGATION OR OVERHEAD SPRINKLER SYSTEMS.

GENERAL INSTRUCTIONS

MIXING

After mixing with water do not allow mixture to stand.

APPLICATION

Soil should be carefully prepared in advance according to the directions for use. Cultivate the area thoroughly and break up clods. Loosen soil deeply one week in advance of application. Soil should be kept moist until application, and if soil has not crusted in the meantime, re-cultivate lightly. Soil temperature should be in the range 10o-32°C to depth of 8cm. Where fumes become unpleasant spray with water to seal fumes in.

INTERVALS FOR CULTIVATION & PLANTING AFTER APPLICATION

Planting may take place 14-21 days after application if soil is light-medium texture and not excessively wet or cold. A minimum interval of 30 days is necessary where soil texture is heavy, high in organic matter, wet or soil temperature is less than 15°C.

A 60 day interval is required if application rate is greater than 1100L/ha. Cultivation should be carried out on wet, heavy soils to prevent crusting and promote drying, 5-7 days after application, and may be repeated when necessary.

DO NOT mix treated soils with untreated soils. Sow an indicator crop to test that no toxic TITAN Metham Soil Fumigant remains in the soil, approximately 7 days before main crop.

Lettuce or radish is suitable for this purpose because of their rapid germination process. Check for root damage which will indicate whether or not soil is still toxic.

POTTING SOIL

Heavy potting soil or heavy field soil, including soils high in clay or organic matter, ensure that proper aeration and drying of the soil takes place.

PRECAUTIONS

Workers previously experiencing skin or respiratory tract irritation from metham-sodium or dazomet exposure should not work with metham-sodium products. After mixing with water do not allow mixture to stand as poisonous fumes are released on standing.

Workers manually sealing should wear the personal protective clothing specified for applicators.

RE-ENTRY PERIOD – FIELD USE

DO NOT allow entry into treated areas for 48 hours. When prior entry is necessary, wear personal protective equipment specified for applicators. Clothing must be laundered after each day's use.

GREENHOUSE APPLICATION, INCLUDING UNDER PLASTIC

DO NOT allow entry into treated areas for 7 days. When prior entry is necessary, wear personal protective equipment specified for applicators. Clothing must be laundered after each day's use.

Thoroughly ventilate greenhouse for 24 hours after removing plastic.

RE-HANDLING PERIOD – POTTING SOIL

Treated soil is to remain covered by plastic sheeting or similar material impermeable to MITC, for 7 days after treatment. When prior handling is necessary, wear personal protective equipment specified for applicators. Clothing must be laundered after each day's use.

PROTECTION OF CROPS, NATIVE & OTHER NON-TARGET PLANTS

DO NOT spray desirable plants and lawns and avoid spray drift. DO NOT apply within 1 metre of drip line of plants. DO NOT use in green houses where plants are present. DO NOT apply under weather conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants/crops, cropping lands and pastures.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

200L only: Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. 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. 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 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and products should not be burnt.

Refillable containers (1000L only): Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

SAFETY DIRECTIONS

Harmful if absorbed by skin contact or swallowed. Poisonous if inhaled. Will damage the eyes, nose and throat and skin. Repeated exposure may cause allergic disorders. Interacts with alcohol – avoid alcohol on day(s) of use. DO NOT inhale vapour or spray mist. The fumes first cause smarting, then watering of eyes. This should be taken as a warning sign. The liquid can cause burns. Use and store in well ventilated areas. When opening the container and preparing product for use, 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 [or goggles and a half facepiece respirator with organic vapour cartridge or canister]. When using the prepared product, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length (nitrile, neoprene) gloves, chemical resistant footwear, a full facepiece respirator with organic vapour/gas cartridge or canister [or goggles and a half facepiece respirator with organic vapour cartridge or canister].

If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product or vapour on skin, immediately wash area with soap and water. If product or vapour in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator and if rubber wash with detergent and warm water and contaminated clothing. DO NOT re-use footwear until thoroughly aired.

FIRST AID

If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone Australia 13 11 26. Avoid giving alcohol. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for TITAN Metham Soil Fumigant is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit www.titanag.com.au

CONDITIONS OF SALE: TITAN AG Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on TITAN AG's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of TITAN AG Pty Ltd has any authority to add to or alter these conditions.

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