

DANGEROUS POISON

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

STRIKE60

DRIP
SOIL FUMIGANT

ACTIVE CONSTITUENTS:

567 g/kg (801 g/L) CHLOROPICRIN

371 g/kg (525 g/L) 1,3-DICHLOROPROPENE

For the control of a wide range of soil borne diseases, plant parasitic nematodes, symphyllans and wireworms, and for the suppression of weeds, as specified in the directions for use table

Supply of this product may be restricted by SUSMP Appendix J to persons authorised under relevant State legislation.

NET CONTENTS:

75 kg

APVMA Approval No.: 80597/118599



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HEALTHY FIELDS. HEALTHY YIELDS.

DIRECTIONS FOR USE

RESTRAINTS

DO NOT apply through any type of Tyne Rig system.
DO NOT apply without adequate dilution with irrigation water.
DO NOT use when soil temperature is below 10°C or above 27°C.
DO NOT use transplants, tools, or move crop residues or soil (e.g., on clothing and footwear) that could carry pests from infested land onto treated areas.
DO NOT apply to non-tarped soil.
DO NOT fumigate more than once per crop.

Broadacre Equivalent Application Rates for the control of a wide range of soil borne diseases, plant parasitic nematodes, symphyllans and wireworms, and for the suppression of weeds

Crop	Pest	Soil Type	Broadacre Rates ¹ kg/ha (L/ha)	Critical Comments
Vegetables, Field crops and Nursery crops	Soil borne diseases (including <i>Fusarium</i> and <i>Verticillium</i> wilts, <i>Rhizoctonia</i> , <i>Pythium</i>); Plant parasitic Nematodes ; Symphyllans (garden centipedes); Wireworms ; For suppression of weeds , see Footnote 3.	Light to medium soils (e.g. coarse-textured sands, sandy loams and loams, and coarse textured clay loams). Use the higher rate for medium soils. Product is not recommended for use on heavy soils (e.g. fine-textured clay loams and clays or soils with very high organic matter such as peats)	400-450 kg/ha ^{2,3,4} (275-310 L/ha) 40-45 g/m ² of row	Pre-plant treatment only: At time of application soil should be in good seed bed condition and generally free of large clods and undecomposed plant material. For application timing, soil conditions, soil preparation and placement of fumigant, application methods and equipment: See APPLICATION. Exposure period: Leave soil undisturbed for at least 7 days after treatment. Aeration period before planting: Use a minimum of 21 days, although longer periods must be used under certain conditions (see also Soil Fumigation Interval under APPLICATION).
Fruit and Nut crops including Strawberries				

Dilution Rate: : Use from 600 mLs up to 1.8 Litres of Strike 60 Drip in 1000 Litres of water (approx. 800 g to 2.4 kg of Strike 60 Drip in 1000 Litres of water). This approximates to an application rate of 500 to 1500 parts per million (ppm) of 1,3-dichloropropene in the irrigation water.
DO NOT exceed a concentration of 1.8 Litres (2.4 kg) Strike 60 Drip in 1000 Litres of water.

- Rates given are broadacre equivalent. Based on the width of the area to be treated, reduce the broadacre rates proportionately or calculate on the amount needed per square metre. In no case should the amount applied per hectare exceed the maximum broadacre application rates (kg/ha or L/ha) given in the above table.
- For cyst-forming nematodes use the max. rate.
- For control of apple replant diseases and for suppression of weeds, the max. rate is recommended. Some weed species, e.g. nutgrass, may not be suppressed by Strike 60 Drip.
- For high disease pressure, use the max. rate.

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

THIS PRODUCT IS TOO HAZARDOUS FOR USE IN THE HOME GARDEN.

IN TASMANIA, THIS PRODUCT IS NOT TO BE SOLD OR USED WITHOUT A LICENCE FROM THE REGISTRAR OF PESTICIDES.

IN SOUTH AUSTRALIA, THIS PRODUCT IS NOT TO BE SOLD OR USED WITHOUT A LICENCE FROM THE HEALTH COMMISSION.

GENERAL INSTRUCTIONS

Strike 60 Drip is a multi-purpose liquid fumigant for pre-plant treatment of cropland soil using drip irrigation systems only. Strike 60 Drip should be used as part of a management programme involving rotation, resistant varieties, and other cultural practices designed to alleviate soil borne diseases, plant parasitic nematodes, wireworms and symphyllans. Strike 60 Drip may also suppress some weeds.

Calibration

Calibration must be done in a manner that does not release Strike 60 Drip above the soil. Recommended methods are use of a flow meter or determining flow rate by dispensing an alternative fluid such as water or diesel fuel into collection cups.

General

- Before fumigation, soil sampling for the type and number of pests present is recommended. In fields where pre-treatment soil samples indicate the presence of high population levels of soil-borne nematodes, a successful fumigation cannot be expected to eradicate entire populations. Therefore, post-treatment sampling is recommended to determine the need for additional pest management practices.
- For best results, it may be necessary to treat soils planted to annual crops every year.
- Fumigation may temporarily raise the level of ammonium nitrogen and soluble salts in the soil. This is most likely to occur when heavy rates of fertiliser are applied to soils before fumigation, especially if the soils are cold, wet, acid or high in organic matter. To avoid ammonia injury or nitrate starvation (or both) to crops grown on high organic soils, DO NOT use fertilisers containing ammonium salts and use only fertilisers containing nitrates, until after the crop is well established and the soil temperature is above 18°C. In low organic soils, do not apply more than 2/3 of the nitrogen requirements from fertilizers containing ammonium salts until the crop is well established and the soil temperature is above 18°C.
- Certain nursery crops such as citrus seedlings and vegetable crops such as cauliflower have shown evidence of phosphorus deficiency following fumigation. To avoid this possible effect, additional phosphate fertiliser (foliar applied) is recommended where experience indicates a deficiency may occur.

APPLICATION

Application Timing

Strike 60 Drip can be applied at any time of the year when soil conditions permit. Conditions that allow rapid diffusion of the fumigant as a gas through the soil normally give best results. Strike 60 Drip does not provide residual control of soil pests and must be applied before planting each crop. Below are application guidelines and soil condition requirements required at the time of application. Failure to meet these conditions may result in unsatisfactory product performance.

Drip Application Only

Apply Strike 60 Drip as a pre-plant application through surface or buried drip or trickle irrigation systems. All applications must be sealed with a plastic fumigation tarp.

The volume of water required must be sufficient to wet the soil to the depth required for treatment. Pre-irrigation may be needed to wet soil sufficiently. The use of a plastic tarp as mulch to cover beds during and after fumigation will improve efficacy of drip applications. The use of plastic tarps is recommended for more difficult to control diseases, e.g. *Verticillium* wilt, and for weed suppression.

The fumigant retention properties of plastic tarps vary and may affect results. Check with the tarp supplier regarding retention characteristics.

Soil Fumigation Intervals

- Exposure Period:** Leave the soil undisturbed for at least 7 days after application of the fumigant. A longer undisturbed interval is required if the soil becomes either cold or wetter than required and for deep-rooted tree, shrub and vine planting sites.
- Planting Interval:** To prevent phytotoxicity after the exposure period, make sure the fumigant has dissipated completely before planting the crop. Do not plant crops if the odour of Strike 60 Drip is present. Under optimal dissipation conditions, as occurs in warm, moist soil situations, allow 1 week for every 100 L/ha used with a minimum interval of 21 days following application before planting the crop unless an approved plant germination test verifies that the product has dissipated sufficiently to allow planting. A longer aeration period will be required if the soil is cold, wet or was "surface-sealed" under wet conditions and for deep-rooted tree, shrub and vine planting sites. Higher organic matter levels may also require a longer planting interval. Saturated, cool to cold soil can remain phytotoxic for a long period. Seed may be used as a bioassay to determine if Strike 60 Drip is present in the soil at concentrations sufficient to cause plant injury.

Soil Temperature
Optimal temperatures for application are between 15°C and 25°C at the intended depth of fumigation.

Soil Preparation

The soil should be generally free of large clods. Large clods can prevent effective soil sealing and reduce effectiveness of Strike 60 Drip. Plant residues should be thoroughly incorporated into the soil prior to treatment to avoid interfering with application. Undecomposed plant material may harbour pests that will not be controlled by fumigation. Little or no crop residue should be present on the soil surface. Compacted soil layers within the desired treatment zone should be fractured before application of the fumigant. Deviation from the above conditions may result in unsatisfactory results.

Placement of Fumigant

Strike 60 Drip may be applied as either a broadacre (overall) or row treatment via drip or trickle irrigation. Deeper placement is recommended when fumigating soil to be planted to deep-rooted plants, such as perennial fruit and nut crops, or to control deeply distributed pests. The amount of water applied must be sufficient to ensure adequate wetting of the soil in the desired fumigation zone.

Application Methods and Equipment

Drip emitters should be spaced evenly apart and close enough to wet the entire bed.

Planting should occur within the treated area.

Step 1: The irrigation system must be thoroughly checked for leaks before the start of the application. Leak detection requires that the irrigation system be at full operating pressure. Any leaks discovered during the pre-application check must be repaired prior to the start of the application.

Step 2: Pre-application priming of the beds with irrigation water 1-3 days before application will enhance the distribution of Strike 60 Drip. Moderate pre-irrigation may enhance coverage in very sandy soils, very dry conditions, or in soils with deep buried tape. Less pre-irrigation is generally needed for heavier soils.

Step 3: Apply appropriate rate (see DIRECTIONS FOR USE) of Strike 60 Drip in enough water so that the soil moisture throughout the treatment zone, including near the soil surface, is at or near field capacity. Strike 60 Drip must be metered into the water supply and should pass through a mixing device (such as a centrifugal pump or static mixer, coarse filter or fine strainer) to assure proper agitation before it is distributed into the drip irrigation line system. Do not exceed a concentration of 1.8 Litres (2.4 kg) of Strike 60 Drip in 1000 Litres of irrigation water. Do not allow treatment solution to accumulate on the soil surface. If ponding, puddling or run-off occurs, then 1) discontinue application immediately, and 2) cover with soil to absorb.

Step 4: After application of Strike 60 Drip, continue to irrigate the area with sufficient untreated water to flush the mixture from the irrigation system completely. Make sure any rigid PVC dead end or low spots are drained or flushed completely. **Do not allow any Strike 60 Drip to remain in the irrigation system.** Leave the soil undisturbed for at least 21 days; then proceed with normal crop management activities.

Special Use Preparations for Chemigation Application Equipment

- Apply this product only through surface or buried tape drip irrigation systems. Do not apply this product through any other type of irrigation system.
- Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact the distributor, equipment manufacturers, or other experts.
- Do not connect irrigation system used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.
- Do not apply this product through any other type of irrigation system except as described in the labelling.
- Only a person knowledgeable of the chemigation system and responsible for its operation, or a person under the supervision of the responsible person, shall operate the system and make necessary adjustments should the need arise.
- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent back flow contamination of the water source.
- The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the chemical supply or injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, automatic valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank

when the irrigation system is either automatically or manually shut down.

- The system must contain a functional interlock to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Injection system must use a metering pump, such as a positive displacement injection or diaphragm pump, venturi system, or a pressure-safe cylinder containing Strike 60 Drip equipped with a metering valve and flow meter. This equipment must be constructed of materials compatible with Strike 60 Drip and capable of being fitted with a system interlock.
- Strike 60 Drip should be injected into the centre of the irrigation water stream by using a suitable dip tube. This will prevent damage from undiluted fumigant contacting PVC pipe at the point of injection.

Recontamination Prevention

Strike 60 Drip will control pests that are present in the soil treatment zone at the time of fumigation. It will not control pests that are introduced into soil after fumigation. To avoid reinfestation of treated soil, DO NOT use irrigation water, transplants, seed pieces, or equipment that could carry soil borne pests from infested land. Avoid contamination from moving infested soil onto treated beds through cultivation, movement of soil from below the treated zone, dumping contaminated soil in treated fields and soil contamination from equipment or crop remains. Clean equipment carefully and ensure shoes and/or clothing are cleaned of soil before entering treated fields.

Cleaning Equipment

- Clean equipment of all soil or plant debris before using but DO NOT allow water to enter fumigant lines or containers.
- Since this product is corrosive under certain conditions, flush all application equipment with diesel oil or kerosene immediately after use. Dispose of flushing solution by incorporation into the treated field or by other means in accordance with appropriate State legislation.
- Fill pumps and meters with new motor oil or a 50% motor oil/diesel oil mixture before storing.

PRECAUTIONS

Signs or placards as follows must be prominently shown at all approaches to the fumigation site:

"DANGER - KEEP OUT - POISONOUS GAS - FUMIGATION IN PROGRESS - KEEP AWAY"

These signs should also include contractor's name and address plus "Poisons Information Centre. Phone: Australia 13 11 26".

Workers conducting any activity within 2 metres of unshielded, pressurised hoses containing Strike 60 Drip must wear the protective equipment as defined in the product's Safety Directions. Other workers in the general application area should wear normal work clothing and non-sparking rubber boots or over boots (not steel-capped).

DO NOT enter the fumigation risk area, where chloropicrin concentrations exceed 0.1 ppm (0.67 mg/m³) without appropriate personal protective equipment including cotton overalls buttoned to the neck and wrist, chemical resistant gloves, chemical resistant footwear (rubber boots or overboots, not steel-capped) and half face piece respirator with organic vapour cartridge plus goggles.

Re-Entry Period

Do not allow entry into treated areas for 5 days after treatment. When prior entry is necessary, or when odour persists beyond 7 days after treatment and entry is required, wear cotton overalls buttoned to the neck and wrist, chemical resistant gloves, chemical resistant footwear (rubber boots or overboots, not steel-capped) and full face piece respirator with organic vapour/gas cartridge or canister.

DO NOT enter treated fields until 48 hours after tarp removal, unless wearing cotton overalls buttoned to the neck and wrist, chemical resistant gloves, chemical resistant footwear (rubber boots or overboots, not steel capped) and full face piece respirator with organic vapour/gas cartridge or canister plus goggles.

Buffer Zones for Tarped Applications

Maintain buffer zones around treated areas from the commencement of fumigant application until 5 days after the tarps have been perforated and/or removed, if perforation and/or removal occurs within 14 days of fumigant application.

- Treated field areas up to 4 ha and greenhouses: Allow a buffer zone (risk area) of 15 metres (minimum) from the fumigation area during soil fumigation.

- Treated field areas greater than 4 ha: Allow a buffer zone (risk area) of

Flammable liquid and vapour. Toxic if swallowed. Fatal in contact with skin. Fatal if inhaled. May cause an allergic skin reaction. Causes serious eye damage. Causes severe skin burns and eye damage. May cause respiratory irritation. Suspected of causing cancer. Causes damage to organs (respiratory system). Causes damage to organs (lung, liver, kidney, respiratory system) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

UN 3489
TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. (CHLOROPICRIN; 1,3-DICHLOROPROPENE)

IN A TRANSPORT EMERGENCY
DIAL 000
POLICE OR FIRE BRIGADE

Batch No.:

D.O.M.:

Strike 60 Drip weighs 1415 g/L.

30 metres (minimum) from the fumigation area during soil fumigation.

Soil Re-Handling Period

DO NOT handle or plant into treated soil for 14 days after completion of fumigation.

Ground Water Advisory Statement

The 1,3-dichloropropene in Strike 60 Drip is known to move through soil and under certain conditions has the potential to reach ground water. Application in areas where soils are permeable and ground water is near the surface could result in ground water contamination for a period of time after treatment. Do not apply within 30 metres of any well used for drinkable water.

Other Precautions

- DO NOT use in enclosed greenhouses or other enclosed areas.
- DO NOT drop, bump or drag cylinders.
- DO NOT unload cylinders by rope-sling, hooks or tongs.
- Keep cylinders upright in tamper-proof airy stores, away from dwellings, food and feed stuffs.
- Put out all pilot lights and glowing heating units.
- DO NOT use containers, pumps or other transfer equipment made of aluminium, magnesium or their alloys as under certain conditions this product may be severely corrosive to such metals. Australian Standards approved Teflon-braided hoses are preferred as transfer lines for this product. DO NOT use polyethylene tubing as transfer hoses.
- DO NOT use containers, pumps or other transfer equipment made of aluminium, magnesium or their alloys as under certain conditions this product may be severely corrosive to such metals. Australian Standards approved Teflon-braided hoses are preferred as transfer lines for this product. DO NOT use polyethylene tubing as transfer hoses.
- DO NOT contaminate food.
- DO NOT allow this chemical to contaminate water used for irrigation, drinking or other domestic purposes.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

- DO NOT apply within 1.5 m of desirable plants or living trees.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

- DO NOT contaminate streams, rivers or waterways with the chemical or used containers.
- DO NOT fumigate more than once per crop.
- DO NOT apply Strike 60 Drip within 5 metres of aquatic environments such as rivers, streams, marshes and other water bodies.

STORAGE AND DISPOSAL

- Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.
- Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers.
- Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.
- Do not use empty containers to store any other material.

SAFETY DIRECTIONS

Vapour is harmful to health on prolonged exposure. Very dangerous. Product is poisonous if inhaled. Will irritate the nose and throat and skin. Attacks eyes. The fumes first cause smarting, then watering of the eyes. This should be taken as warning sign. The liquid can cause burns. Harmful if swallowed. Avoid contact with eyes and skin. Do not inhale vapour. Protect eyes when using. When opening the container and using the product and when uncovering the treated area wear chemical resistant clothing buttoned to the neck and wrist, elbow-length chemical resistant gloves, chemical resistant footwear, half face piece respirator with organic vapour cartridge plus goggles. Detailed instructions for safe use appear in State regulations. If clothes become contaminated with product, remove clothing immediately. If product on skin, immediately wash area with soap and water. Thoroughly ventilate treated areas before reoccupying. 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, respirator, goggles and contaminated clothing. Do not re-use footwear until thoroughly aired.

FIRST AID

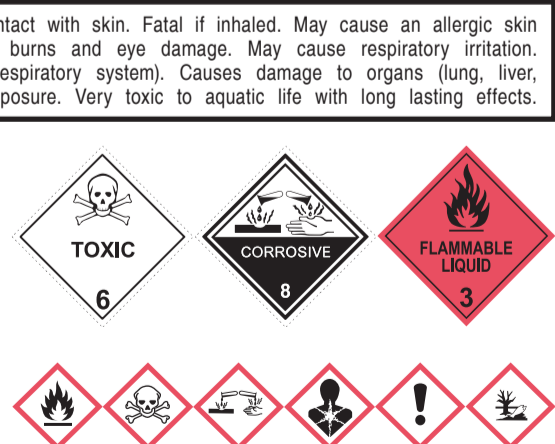
If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. Remove from contaminated area. Apply artificial respiration if not breathing. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet, which is available from the supplier/distributor.

CONDITIONS OF SALE

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label, when used in accordance with directions under normal conditions of use. No warranty or merchantability or fitness for a particular purpose, express or implied, extends to the use of the product contrary to label instructions or under off-label permits not endorsed by TriCal Australia Pty Ltd, or under abnormal conditions.



[Date of Labeling: 2019 January 21]