

# DANGEROUS POISON

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

# STRIKE 35

DRIP  
SOIL FUMIGANT

## ACTIVE CONSTITUENTS:

608 g/kg (805 g/L) 1,3-DICHLOROPROPENE  
333 g/kg (445 g/L) CHLOROPICRIN

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

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

FOR USE ONLY BY FUMIGATORS WHO HAVE BEEN TRAINED IN THE TRICAL TRAINING PROGRAM PROVIDED BY THE DISTRIBUTOR

NET CONTENTS:  
\_\_\_\_\_kg

APVMA Approval No.: 69731/144484



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HEALTHY FIELDS. HEALTHY YIELDS.

## DIRECTIONS FOR USE: RESTRAINTS

DO NOT apply through any type of Tyne Rig system.  
DO NOT use when soil temperature is below 10°C or above 27°C.  
DO NOT treat soil when very wet or very dry at depth of fumigation.  
DO NOT use in soils that are very high in organic matter (e.g., muck or peats).

Broadacre Equivalent Application Rates for the control of a wide range of soilborne diseases, plant parasitic nematodes, symphylans, wireworms and suppression of weeds.

| Crop                                       | Pest  | Soil Type  | Broadacre Rates <sup>1</sup> kg/ha (L/ha)                       | Critical Comments   |
|--|---|--|---|---|
| Vegetables, Field crops and Nursery crops  | Soilborne diseases including <i>Fusarium</i> and <i>Verticillium</i> wilts, <i>Rhizoctonia</i> , <i>Pythium</i> ; Plant parasitic Nematodes; Symphylans (garden centipedes); Wireworms; For suppression of weeds, see Footnote 3. | Light soils (e.g., coarse-textured sands, sandy loams and loams) | 270-470 (row: 27-47 g/m <sup>2</sup> ) (200-350) <sup>1,4</sup> | Preplant treatment only: At time of application, soil should be in good seed bed condition, free of clods and undecomposed plant material.<br><br>For application timing, soil conditions, soil preparation and placement of fumigant, application methods and equipment: See APPLICATION.<br><br>Exposure period: Leave soil undisturbed for at least 7 days after treatment.<br><br>Aeration period before planting: Use a minimum of 21 days after application, although longer periods must be used under certain conditions (see also Soil Fumigation Interval under APPLICATION). |
|  |   | Heavy soils (e.g., fine-textured clay).                          | 470-800 (row: 47-80 g/m <sup>2</sup> ) (350-600) <sup>1,4</sup> |   |
| Fruit and Nut crops including Strawberries |   | All soil types   | 470-940 (row: 47-94 g/m <sup>2</sup> ) (350-700) <sup>1,4</sup> |   |

**Dilution Rate:** Use from 600 mLs to 1.8 Litres of Strike 35 Drip Soil Fumigant in 1000 Litres of water (approx. 800 g to 2.4 kg of Strike 35 Drip Soil Fumigant 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 35 Drip Soil Fumigant 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 at least 335 kg/ha (250 L/ha).
- For control of apple replant diseases and for suppression of weeds, higher rates (>670 kg/ha or >500 L/ha) are recommended.
- For high disease and weed pressure use higher rates. Some weed species e.g., nutgrass, may not be suppressed at these rates.

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.

## Calibration

Calibration must be done in a manner that does not release product 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. Flow meter capacity previously calibrated for water or methyl bromide may be converted to Strike 35 Drip Soil Fumigant capacity using the following equations:

Flow capacity for water x 0.85 = flow capacity for Strike 35 Drip Soil Fumigant  
Flow capacity for methyl bromide x 1.2 = flow capacity for Strike 35 Drip Soil Fumigant  
Flow capacity for diesel fuel is roughly the same as for Strike 35 Drip Soil Fumigant

## GENERAL INSTRUCTIONS

Strike 35 Drip Soil Fumigant is a multi-purpose liquid fumigant for preplant treatment of cropland soil using drip irrigation systems only. Strike 35 Drip Soil Fumigant should be used as part of a management program involving rotation, resistant varieties, and other cultural practices designed to alleviate soilborne diseases, plant parasitic nematodes, wireworms and symphylans. Strike 35 Drip Soil Fumigant may suppress weeds.

## 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 soilborne pathogens, 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 either 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 ¼ 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 35 Drip Soil Fumigant 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 35 Drip Soil Fumigant does not provide residual control of soil pests and must be applied before planting each crop. The following soil temperature and moisture conditions should exist at time of application. Failure to meet these conditions may result in unsatisfactory product performance.

### Application Method

**Drip Application:** Apply Strike 35 Drip Soil Fumigant as a preplant application through surface or buried drip irrigation systems. 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. Use of a plastic tarp as much to cover beds during and after fumigation may improve efficacy of drip applications.

**Planting Interval:** Leave the soil undisturbed and unplanted for at least 21 days after application of the fumigant. A longer undisturbed interval is required under cold or wet soil conditions.

To prevent phytotoxicity after fumigation, allow the fumigant to dissipate completely before planting a crop. Under optimum soil conditions for dissipation, 1 week for each 100 L/ha is recommended with a minimum interval of 21 days following application. Seed may be used as a bioassay to determine if Strike 35 Drip Soil Fumigant is present in the soil at concentrations sufficient to cause plant injury. Do not plant if the odour of Strike 35 Drip Soil Fumigant is present.

## Soil Conditions

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

## Soil Preparation

The soil should be free of clods. Large clods can prevent effective soil sealing and reduce effectiveness of Strike 35 Drip Soil Fumigant. 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. No crop residue should be present on the soil surface. Compacted soil layers within the desired treatment zone should be fractured before or during application of the fumigant. Deviation from the above conditions may result in unsatisfactory results.

## Placement of fumigant

Strike 35 Drip Soil Fumigant may be applied as either a broadacre (overall) or row treatment via 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: Moderate pre-irrigation may enhance coverage in very sandy soils, very dry conditions, or in soils with deep buried tape. Except under these conditions, pre-irrigation is not recommended.

**Step 2: Apply appropriate rate (see DIRECTIONS for USE) of Strike 35 Drip Soil Fumigant in enough water so that the soil moisture throughout the treatment zone, including near the soil surface, is at or near field capacity.** Strike 35 Drip Soil Fumigant must be metered into the water supply and should pass through a mixing device (such as a centrifugal pump or static mixer, course 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 35 Drip Soil Fumigant in 1000 Litres of irrigation water. A separate mixing device is not needed if the chemical injection point is at least 20 metres in front of the "T" junction point. For low velocity (laminar) flows, more distance or a mixing device is needed to thoroughly mix the fumigant. 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 3:** After application of Strike 35 Drip Soil Fumigant, 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 35 Drip Soil Fumigant 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 35 Drip Soil Fumigant equipped with a metering valve and flow meter. This equipment must be constructed of materials compatible with Strike 35 Drip Soil Fumigant and capable of being fitted with a system interlock.
- Strike 35 Drip Soil Fumigant 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.

## Soil Fumigation Interval

**1. Exposure Period:** Leave the soil undisturbed for at least 5 days after treatment. A longer undisturbed interval is required if the soil becomes either cold or wetter than required by the correct amount of irrigation and for deep-rooted tree, shrub and vine planting sites.

**2. Aeration Period before Planting:** After the exposure period, allow the fumigant to dissipate completely before planting the crop. Do not plant crops if the odour of Strike 35 Drip Soil Fumigant is present within the fumigation zone. Under good dissipation conditions as occurs in warm, moist soil situations, allow 1 week for every 100 kg/ha used 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. Saturated, cool to cold soil can remain phytotoxic for a long period. Under these conditions, an approved plant germination test must be conducted to ensure crop safety at planting.

## Recontamination Prevention

Strike 35 Drip Soil Fumigant 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. Avoid contamination from moving infested soil onto treated beds through cultivation, movement of soil from below the treated zone or soil contamination from equipment. 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 35 Drip Soil Fumigant 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 overboots (not steel-capped).

## 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 5 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-facepiece respirator with organic vapour/gas cartridge or canister.

## Ground Water Advisory Statement

The 1,3-dichloropropene in Strike 35 Drip Soil Fumigant 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.

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



For specialist advice in the event of  
**A CHEMICAL EMERGENCY**  
(Spill, Leak, Fire, Exposure or Accident), Call  
CHEMTREC: 1 800 862 115

## NOTICE

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. No warranty of 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.

Batch No.:

D.O.M.: