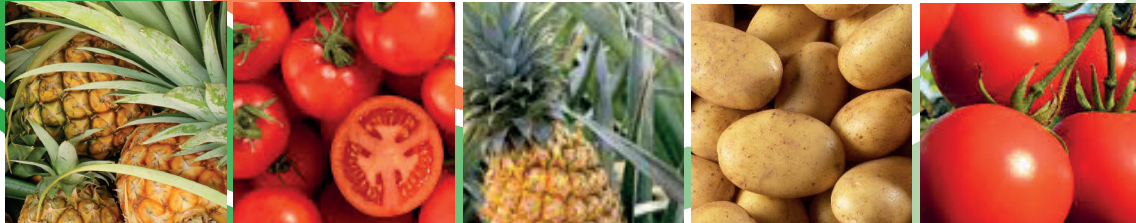


# HARVEST DiCLO

Distributed by: Harvest Chemicals  
 Registration Holder/Registrasiehouer Harvest Crop Solutions (Pty)Ltd.  
 Reg.No. 2014/187205/07  
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 Poison Helpline: 085 155 5777



A liquid soil fumigant for the control of plant parasitic nematodes in the soil.

'n Vloeibare berokingsmiddel vir die beheer van parasitiese aalwurms in die grond.

Batch No	Reg. No. L 10939, Act No 36 of 1947.		Reg Nr L10939, Wet Nr. 36 van 1947.		Lot Nr
<input type="text"/>	<b>INSECTICIDE GROUP CODE</b>	<b>8A</b>	<b>INSEKODER GROEPKODE</b>	<input type="text"/>	
Date of manufacture	<b>Active Ingredient:</b> 1,3-dichloropropene (Chlorinated Hydrocarbon)	<b>1170g/ ℓ</b>	<b>AktieweBestanddeel:</b> 1,3-dichloropropen (Chlorineerde Koolwaterstof)	<input type="text"/>	Vervaardigings- datum
<input type="text"/>	<b>Nett Volume</b>	<b>200 ℓ</b>	<b>Netto Volume</b>	<input type="text"/>	<input type="text"/>



## WARNINGS

- Handle with extreme care.
- Store under lock and key away from food and feedstuffs, seed and other agricultural chemicals.
- Poisonous by swallowing, inhalation and skin contact.
- Causes extreme eye and skin irritation.
- Toxic to fish, bees and wildlife.
- Keep away and out of reach of children, animals and uninformed persons.
- Store in a cool place (20°C)
- Use only before bud burst.
- Flammable- Do not store or apply near open flames or sparks.
- RE-ENTRY: Do not re-enter the treated area within 2 days after treatment unless protective clothing is worn.
- In case of poisoning call a doctor and show this label to him/her.

ALTHOUGH THIS REMEDY HAS BEEN EXTENSIVELY TESTED UNDER A LARGE VARIETY OF CONDITIONS THE REGISTRATION HOLDER DOES NOT WARRANT THAT IT WILL BE EFFICACIOUS UNDER ALL CONDITIONS BECAUSE THE ACTION AND EFFECT THEREOF MAY BE AFFECTED BY FACTORS SUCH AS ABNORMAL SOIL, CLIMATIC AND STORAGE CONDITIONS: QUALITY OF DILUTION WATER; COMPATIBILITY WITH OTHER SUBSTANCES NOT INDICATED ON THE LABEL AND THE OCCURRENCE OF RESISTANCE OF THE PEST AGAINST THE REMEDY CONCERNED AS WELL AS BY THE METHOD, TIME AND ACCURACY OF APPLICATION. THE REGISTRATION HOLDER FURTHERMORE DOES NOT ACCEPT RESPONSIBILITY FOR DAMAGE TO CROPS, VEGETATION, THE ENVIRONMENT OR HARM TO MAN OR ANIMAL OR FOR LACK OF PERFORMANCE OF THE REMEDY CONCERNED DUE TO FAILURE OF THE USER TO FOLLOW THE LABEL INSTRUCTIONS OR TO THE OCCURRENCE OF CONDITIONS WHICH COULD NOT HAVE BEEN FORESEEN IN TERMS OF THE REGISTRATION. CONSULT THE SUPPLIER IN THE EVENT OF ANY UNCERTAINTY.

**PRECAUTIONS:**

- Wear a face shield protective clothing (overall, rubber boots and gloves during mixture, and a respirator).
- Do not inhale fumes or spray mist.
- After use or in case of accidental skin contact, wash thoroughly with soap and water.
- Do not eat, drink or smoke while mixing or applying or before washing hands and face and change of clothing after use.
- Prevent contamination of food, feedstuff, eating utensils and drinking water.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams and areas not under treatment.
- Do not suck the product through a tube by mouth to blow out clogged lines or nozzles etc.
- Corrosive to metals under certain conditions. Immediately after use, flush equipment with diesel or suitable solvent.
- Ensure the empty container is free of all liquids, open the cap and aerate for 14 days.
- Rinse empty container 3 times with the volume of diesel equal to a minimum of 10% of that of the container. Dispose of the rinsings in a responsible manner before destroying the container in the prescribed manner.  
Destroy empty containers by perforation and flattening and never use for any other purpose.

**SYMPTOMS OF HUMAN POISONING:**

Eyes: Severe redness and/or severe irritation.

Skin: Redness, Swelling of the skin and moderate irritation. In the case of repeated skin contact it will become dry and chapped.

Inhalation: High concentrations may result in coughing and difficulty in breathing, intoxication, nausea, vomiting, abdominal cramps and or diarrhoea. Feelings of intoxication, restlessness, dizziness and drowsiness.

Ingestion: Breathe smells of chloroform, severe irritation to mouth, throat, oesophagus and stomach, nausea, vomiting, abdominal cramps and or diarrhoea. Feelings of intoxication, restlessness, dizziness and drowsiness.

**FIRST AID TREATMENT:**

Eyes: Flush immediately with plenty of clean water for at least 15 minutes. Get medical attention immediately.

Skin: Flush skin immediately with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. If water is not available immediately remove excess chemical from skin with absorbent material such

as towel or dry soil, then proceed at once to a location where water is available.

Inhalation: Remove person to fresh air. If not breathing give artificial respiration, preferably not mouth-to-mouth. If breathing is difficult, give oxygen and call physician.

Swallowed: Do not induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person.

**NOTE TO PHYSICIAN:**

Rapid absorption may occur through lungs if the product is aspirated or swallowed and will cause systematic effect, the decision to induce vomiting or not should be made by physician.

- Give oxygen and watch for early signs of pulmonary oedema. BAL may be used.
- If the material has been ingested, carry out cautious gastric lavage.
- Give no fats or oils, but rather administer a demulcent like alumina gel.
- Meperidine and atropine are indicated for control of pain and gastro-intestinal spasm.
- In severe cases continuous suction by nasal-gastric tube should be considered.
- As with the ingestion of all strong local irritants, the possibility of glottis edema should be kept in mind.
- The administration of corticosteroids or ACTH as an aid in the prevention of oesophageal stricture is recommended.
- Other treatment is also symptomatic and supportive and the physician should be guided by physical signs.
- In cases of inhalation, removal from contamination usually suffices.
- In rare cases of severe over exposure with laryngo and bronchospasm, inhalation of a spray or aerosol of 1% epinephrine or 0,25% iproterrenol may be helpful.

**DIRECTIONS FOR USE:** Use only as directed.

**GENERAL INFORMATION:**

**DESTROYER** will control nematodes that are present in the soil treatment zone at time of fumigation.

It is recommended to determine the type and number of nematodes present in the soil before treatment.

When high nematode populations are present, control may be variable.

It is recommended to sample the soil for nematodes after treatment to determine the need for additional pest management practices, e.g. foliar application.

**COMPATIBILITY:**

Do not mix **DESTROYER** with other agricultural chemicals.

**MIXING INSTRUCTIONS:** **DESTROYER** is applied as a concentrate and is not diluted with water.

**APPLICATION**

- All stalks, leaves and roots of the previous crop must be removed from the land before treatment.
- The soil must be moist, in good tilth and free of clods.
- **DESTROYER** must be placed into the soil between 30cm and 40cm from the surface.
- Do not apply closer than a metre from growing roots of established plants and trees.
- Do not apply to excessively wet soil or when soil temperatures are below 6°C.
- Immediately after the chisel application of **DESTROYER** the soil must be "sealed" to prevent fumigant loss and ensure that an effective concentration of fumigant is maintained within the soil profile for a period of several days.
- Fumigation is more effective if the soil is sealed by rolling and/or light overall irrigation immediately after application.
- For broadcast treatment (flat fumigation), sealing can be accomplished with equipment that will uniformly mix the soil to a depth of 8 to 10cm.
- For row treatment and the forming of planting beds at the time of application, treatment should place the fumigant at least 30cm from the nearest soil surface.
- Allow at least 14 days between treatment and planting the next crop.
- Avoid re-infestation of treated lands and nematodes in contaminated seedlings, equipment and boots, irrigation or flood water, and manure. This includes the introduction of untreated soil into the treated zone.

### **SOIL FUMIGATION TO PLANTING INTERVAL**

After application of **DESTROYER** the treated soil must be undisturbed and unplanted for at least 14 days. A longer undisturbed period is required if the soil becomes cold and wet.

After the fumigation period of at least 14 days, allow the fumigant to dissipate completely before planting the crop. To hasten dissipation, especially if heavy rains and low temperatures have occurred, cultivate the soil to the depth of fumigant application.

Dissipation is usually complete when the odour of the **DESTROYER** is no longer evident at application depth.

**Fruit orchards and Vineyards:** There must be a minimum of 12 months between the removal of the previous crop and soil fumigation.

### **USE PRECAUTIONS:**

Fill pumps and meters with new motor oil or a 50% motor oil/fuel oil mixture before storing application equipment.

Do not use containers, tanks, split nozzles, pumps or other spray equipment made of aluminium, magnesium or their alloys, as under certain conditions **DESTROYER** may be severely corrosive to these metals.

Keep container tightly closed when not in use.

### **FERTILISERS:**

Fumigation may temporarily raise the level of ammonia nitrogen and soluble salts in the soil. This is most likely to occur when heavy rates of fertiliser and fumigant are applied to soils are cold, wet, acid or high in organic matter.

Avoid injury to plant roots by applying the recommended fertiliser after fumigation.

To avoid ammonia injury or nitrate starvation, or both, to crops in high organic soils do not use fertiliser containing ammonium salts and use only fertiliser containing nitrates, until after the crop is well established and the soil is about 18°C.

Buffer zone and annual crops: Do not apply within 1 metre of annual crops or an established tree root zone or under trees.

### **CROP GUIDELINES:**

Perennial crops: Soil samples for nematode infestation (species and numbers) must be taken before previous crops is removed and before the establishment of new fruit orchards and vineyards. The infestation levels will determine dosage rate for **DESTROYER** as well as the necessity for additional nematicide treatments.

Potatoes (Seed and Table): The **DESTROYER** dosage depends on the nematode infestation level, which is determined by the soil sample analysis. An additional nematicide application after emergence may be applied when prolonged control is required.

Pre-harvest tuber sampling for nematodes is recommended.

If the nematode population is high enough to damage the crop, the potatoes must be harvested early. Do not store potatoes with detectable nematode infestation.

CROP/PEST	DOSAGE RATE	REMARKS
<b>PERENNIAL CROPS</b> Pineapples Plant parasitic nematodes	1,5ℓ/100m planting ridge    150ℓ/ha	<p><u>Eastern Cape:</u> Do not exceed 150 ℓ/ha (See 'General information' under Directions for Use). Allow at least 3 weeks between application and planting.</p> <p><u>Ridge Treatment:</u> Apply 2 or 3 evenly spaced rows per ridge            2 rows/ridge: apply 750mℓ per 100m            3 rows/ridge: apply 500mℓ per 100m</p> <p>Overall Treatment: The tines must be placed 30cm apart and each outlet must deliver 450mℓ per 100m row length.</p>
	2,25ℓ/100m planting ridge    225ℓ/ha	<p><u>Kwazulu-Natal:</u> Do not exceed 225 ℓ/ha (See 'General information' under Directions for Use). Allow at least 3 weeks between application and planting.</p> <p><u>Ridge Treatment:</u> Apply 2 or 3 evenly spaced rows per ridge            2 rows/ridge: apply 1125mℓ per 100m            3 rows/ridge: apply 750mℓ per 100m</p> <p>Overall Treatment: The tines must be placed 30cm apart and each outlet must deliver 675mℓ per 100m row length.</p>
<b>ANNUAL CROPS</b> Plant parasitic nematodes  Potatoes Tomatoes	600 - 1000ℓ/100m plant row    60 -100ℓ/ha	<p>Apply to plant row 40cm below final soil surface not later than 14 days before planting. The dosage rate depends on the level of nematode infestation. Apply higher dose rate when the nematode population is high. See "Directions for use" above.</p> <p><u>Row Treatment:</u> Apply to a single row.  <u>Overall Treatment:</u> the application tines must be placed 30cm apart and each outlet must deliver 180 to 300mℓ per 100metre row length.</p>
<b>Before the establishment of orchards, vineyards and nurseries</b>  Plant parasitic nematodes	150 -200ℓ/ha	<p>Allow at least 12 months between the removal of the previous crop and treatment. After final soil preparation, apply as an overall treatment during autumn, but not later than 3 weeks prior to planting. The soil must be damp, well prepared and free of clods and plant material. Apply to a depth of 30 to 35cm. The implement outlets should be placed 30cm apart. To apply at the recommended rates, each outlet must deliver 450 to 600 mℓ over 100m. The dosage depends on infestation level. See 'Directions for use' above.</p>
<u>Seedbeds</u> Plant parasitic nematodes	5mℓ/30cm x 30cm square	Apply with soil injector to a depth of 20 -25cm