Read the label before opening the container. For full particulars, see enclosed leaflet.

KEEP OUT OF REACH OF CHILDREN AND ANIMALS

DILONE AL

South Africa Reg. No: L8936 Act No. 36 of 1947

IRAC INSECTICIDE GROUP CODE: 8A

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

ACTIVE INGREDIENT:

1.3-Dichloropropene (chlorinated hydrocarbon).....1 100g/ℓ

Product Information: 072 678 8226
In case of poisoning: 082 446 8946

HAZARD STATEMENTS

- Flammable liquid and vapour
- Toxic if swallowed
- May be fatal if swallowed and enters airways
- Harmful in contact with skin
- Causes skin irritation
- May cause an allergic skin reaction
- Causes serious eye irritation
- Harmful if inhaled
- May cause respiratory irritation
- Toxic to aquatic life with long lasting effects.



DANGER

PRECAUTIONARY STATEMENTS

- Do not eat, drink, or smoke when using this product.
- Wash hands and face thoroughly after handling

enviro™ bio-chem

Registration holder: Enviro Crop Protection (Pty) Ltd.
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Expiry Date:
Batch No:
Date of Manufacture:

UN No. 2047

WARNINGS:

- Flammable liquid and vapour
- Toxic if swallowed
- May be fatal if swallowed and enters airways
- Harmful in contact with skin
- Causes skin irritation
- May cause an allergic skin reaction
- Causes serious eye irritation
- Harmful if inhaled
- May cause respiratory irritation
- Toxic to aquatic life with long lasting effects.
- Store in the original container under lock and key in a cool dry place.
- Store away from food, feedstuffs, seed and fertiliser.
- Keep out of reach of children, uninformed persons and animals.
- Toxic to fish and wildlife.
- Flammable: Do not store or apply near open flames or sparks.
- Re-entry: Do not enter the treated area within 2 days after treatment unless protective clothes are worn.
- In case of poisoning call a doctor and show him this label.

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 the 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 event of any uncertainty.

PRECAUTIONS:

- Do not handle until all safety precautions have been read and understood.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Keep container tightly closed.
- Avoid breathing mist, vapours and spray.
- Wash hands and face thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release into the environment.
- Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
- If exposed or concerned: Get medical attention.
- Take off contaminated clothing and wash it before reuse.
- Prevent contamination of food, feedstuffs, drinking water and eating utensils.
- Prevent contamination of other crops, grazing, rivers, dams or areas not under treatment.
- Wash application equipment after use. See “Use Precautions” under “DIRECTIONS FOR USE”.
- Triple rinse empty container in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the empty container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsings to the content of the spray tank. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

RELEVANT SUBSTANCES:

1,3-Dichloropropene 95.01%

SYMPTOMS OF HUMAN POISONING:

- Eyes: severe redness and watering, and/or severe irritation.
- Skin: this product can be absorbed by the skin; redness, swelling of the skin and moderate irritation. In the case of repeated skin contact: dry and chapped skin.
- Inhalation: nose and throat irritation; high concentrations may result in coughing and difficulty in breathing, intoxication, restlessness, dizziness, nausea, vomiting, and drowsiness; symptoms may be delayed.
- Ingestion: breath 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:

INHALATION: Remove person to fresh air and keep comfortable for breathing.
INGESTION: Immediately call a POISON CENTER/doctor/physician. Do NOT induce vomiting.
SKIN CONTACT: Remove/Take off immediately all contaminated clothing. Wash with plenty of water and non-abrasive soap. If skin irritation occurs: get medical advice.
EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists: Get medical advice.

NOTE TO PHYSICIAN

Rapid absorption may occur through lungs if the product is aspirated or swallowed and will cause a systemic effect, the decision to induce vomiting or not should be made by a 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. Mepridine 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 glottic 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 clinical 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% isoproterrenol may be helpful.

DIRECTIONS FOR USE: Use only as directed.

General information:

- **Dilone AL** will control nematodes that are present in the soil treatment zone at time of fumigation. It will not control nematodes that are introduced into the soil after fumigation.
- It is recommended to determine the type and number of nematodes present in the soil before treatment with **Dilone AL**.
- 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 practises, e.g. foliar application.

Compatibility:
Do not mix **Dilone AL** with other agricultural chemicals.

Mixing instructions:
Dilone AL 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.
- **Dilone AL** must be placed into the soil between 30cm and 40cm from the surface.
- Do not apply to excessively wet soil or when soil temperatures are below 6°C.
- Fumigation is more effective if the soil is sealed by rolling and/or light overall irrigation immediately after application.
- Allow at least 14 days between treatment and planting the next crop.
- Do not apply closer than a metre from growing roots of established plants and trees.
- Avoid re-infestation of treated lands with nematodes in contaminated seedlings, equipment and boots, irrigation or flood water, and manure. This includes the introduction of untreated soil into the treated zone.

Sealing the soil after application:
- Immediately after the chisel application of **Dilone AL** 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.
- For broadcast treatment (flat fumigation), sealing can be accomplished with equipment that will uniformly mix the soil to a depth of 8 to 10cm. This will cover chisel or plough traces that can allow the fumigant to escape. A tandem disc or similar equipment may be used for this purpose.
- 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.

Soil fumigation to planting interval:
- After application of **Dilone AL** the treated soil must be undisturbed and unplanted for at least 14 days. A longer undisturbed period is required if the soil becomes cold or 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 or low temperatures have occurred, cultivate the soil to the depth of fumigant application. Do not cultivate deeper than the fumigation was applied.
- Dissipation is usually complete when the odour of **Dilone AL** is no longer evident at the application depth. Do not plant any crop if the odour of **Dilone AL** is present within the zone of fumigation.

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

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 that are cold, wet, acidic 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 temperature is above 18°C.

Use precautions:
- **Dilone AL** is corrosive to metal under certain conditions. Flush all application equipment with diesel or a similar solvent immediately after use. Do not contaminate crops, rivers, dams and grazing with rinsate.
- 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 **Dilone AL** may be severely corrosive to these metals.
- Keep container tightly closed when not in use.

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:
Potatoes (Seed and Table)
The **Dilone AL** 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 a detectable nematode infestation.

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

CROP/PEST	DOSAGE	REMARKS
Annual Crops Potatoes Tomatoes Plant Parasitic nematodes		Apply to the 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 "Direction for use" above.
	600 - 1 000mℓ per 100m plant row	**Row Treatment:** Apply to a single row.
	60 - 100ℓ/ha	**Overall Treatment:** The application tines must be placed 30cm apart and each outlet must deliver 180 to 300mℓ/100m row length.
Perennial Crops Pineapples Plant Parasitic nematodes		**Eastern Cape** Do not exceed 150ℓ/ha (see "General information" under Directions for Use). Allow at least three weeks between application and planting.
	1.5ℓ/100m planting ridge	**Ridge Treatment:** Apply to 2 or 3 evenly spaced rows per ridge. 2 rows/ridge: Apply 750mℓ/100m. 3 rows/ridge: Apply 500mℓ/100m.
	150ℓ/ha	**Overall Treatment:** The tines must be placed 30cm apart and each outlet must deliver 450mℓ/100m row length.
		Kwa-Zulu Natal: Do not exceed 225ℓ/ha. (See General information under Directions for use). Allow at least three weeks between application and planting.
	2.25ℓ/100m planting ridge	**Ridge Treatment:** Apply to 2 or 3 evenly spaced rows per ridge. 2 rows/ridge: Apply 1 125mℓ/100m. 3 rows /ridge: Apply 750mℓ/100m.
	225ℓ/ha	**Overall Treatment:** The tines must be placed 30cm apart and each outlet must deliver 675mℓ/100m row length.

CROP/PEST	DOSAGE	REMARKS
Before the establishment of Orchards, Vineyards and Nurseries Plant Parasitic nematodes	150 - 200ℓ/ha	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 600mℓ over 100 metres. The dosage depends on infestation level. See “Directions for use” above.
Seedbeds Plant Parasitic nematodes	5mℓ per 30cm x 30cm square	Apply with a soil injector to a depth of 20 to 25cm.