

TRINITY EC

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY

VERWYS NA BESONDERHEDE SOOS OP HOUER / SAK GEDRUK

GEBRUIKSAANWYSINGS INGESLUIT

Lotnummer

Datum van vervaardiging

TRINITY EC

HERBICIDE

Reg. No. L8362 Act/Wet No. 36 of/van 1947

1:23/04/2009


An emulsifiable concentrate herbicide for the post-emergence control of wild oats and darnel in wheat, barley and Durum.

'n Emulgeerbare konsentraat onkruidodder vir die na-opkoms beheer van wildehawer en drabok in koring, gars en Durum.


HRAC HERBICIDE GROUP CODE	A	HRAC ONKRUIDDODER GROEPKODE
ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL		
Tralkoxydim (cyclohexanone compound) 100 g/ℓ Tralkoksiedim (sikloheksanoonverbinding)		

Registration Holder / Registrasiehouer
Meridian Agrochemical Company (Pty.) Ltd. / (Edms.) Bpk.
 Reg. No. 2000/010819/07
 P.O. Box / Posbus 436, Modderfontein, 1645, South Africa / Suid- Afrika





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HARMFUL / SKADELIK



UN Number: 1993



DIRECTIONS FOR USE ENCLOSED REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

Batch Number

Date of manufacture

WARNINGS

Wheat and barley: Allow 3 days between last application and grazing by farm animals.

- Handle with care.
- Poisonous by swallowing.
- Avoid eye and skin contact. Undiluted **TRINITY EC** may cause eye and skin irritation.
- **Flammable** - keep away from open flames.
- Keep out of reach of children, uninformed persons and animals.
- Store in the original container, tightly closed in a cool place away from food and feed.
- **Re-entry** – Do not enter treated area until spray deposit has dried.
- **TRINITY EC** has been tested on the most important commercial cultivars without any phyto toxic effects. More susceptible cultivars may be released in future which need to be tested; for this apply **TRINITY EC** to a limited test area before commercial applications are made.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not apply over water bodies and ensure that spray drift will not contaminate areas under treatment.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be effective under all conditions. The activity and effect thereof may be affected by factors such as abnormal climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weed against the remedy, 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 by 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 rubber gloves and face shield when handling the concentrate.
- Avoid skin and contact with eyes by wearing protective clothing when mixing the product.
- Wash with soap and water after use and accidental skin contact as well as contaminated clothing.
- In case of eye contact, immediately flush with water.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face.
- Do not inhale spray mist and avoid contact with spray.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Dispose of wash water where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Destroy the empty container and do not use for any other purpose.

SYMPTOMS OF HUMAN POISONING

No case has been recorded to date. Symptoms may include: sedation, dyspnea, exophthalmos, curved posture.

FIRST AID TREATMENT

Skin contact: Remove patient from source of poisoning and keep him quiet and reassured. Remove contaminated clothing as well as shoes and leather goods. Wash body with non-abrasive soap and lots of water. Persons providing first aid must wear gloves to avoid self-contamination. Seek medical advice if necessary.

Eye contact: Flush eyes immediately with large amounts of clean water for approximately 15 minutes. Occasionally lift the upper and lower lids. If eye irritation persists, get medical attention.

Inhalation: Remove patient to a well ventilated area and loosen clothing around the neck. Perform artificial respiration and administer oxygen if necessary. Keep patient warm and calm. **Seek medical advice immediately.**

Ingestion: If the product has been ingested, induce vomiting provided the patient is conscious. Vomiting should be supervised by a physician because of possible pulmonary damage by aspiration of the solvent. Get medical attention immediately. Administer a large quantity of activated medical charcoal.

NOTE TO PHYSICIAN

No specific antidote is known. Treat symptomatically and supportively. Keep patient under observation.

RESISTANCE WARNING

For resistance management, **TRINITY EC** is a group code A herbicide. Any weed population may contain individuals naturally resistant to **TRINITY EC** and other group code A herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by **TRINITY EC** or any other group code A herbicide.

To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with registered products from different herbicide group codes.
- Integrate other control methods (chemical, cultural, biological) into weed control programmes.

For specific information on resistance management contact the registration holder of this product.

The presence of resistant weeds is difficult to detect prior to use and therefore neither the Registration Holder nor the Distributor can accept responsibility for any losses as a result of **TRINITY EC** not controlling resistant weeds. Do not apply **TRINITY EC** in situations where weed resistance has been confirmed. Sub-standard application of **TRINITY EC** or other acetyl CoA carboxylase inhibitor herbicides will lead to inferior weed control and may assist in development of herbicide resistance.

USE RESTRICTIONS

The performance and herbicidal activity of **TRINITY EC** can be influenced by a number of factors which affect plant growth. When an application of **TRINITY EC** is anticipated avoid the following conditions: - Moisture stress - weeds under drought stress are less effectively controlled.

- Physiological stress - cold weather, sub freezing temperatures, waterlogged conditions (free water on the soil surface) can cause reduced **TRINITY EC** uptake with resultant unsatisfactory control. Optimum growing conditions must prevail for at least 5 days after the application of **TRINITY EC**.
- Do not apply **TRINITY EC** to undersown cereals.
- Sulphonyl urea herbicides should not be applied to wheat or barley within 10 days after the application of **TRINITY EC**.
- **TRINITY EC** may only be applied 10 or more days after the application of a sulphonyl urea herbicide.
- No tank mixing should be done with any of the aryloxyalkanoic acid herbicides.
- Rain or irrigation within 1 hour of **TRINITY EC** application may result in reduced efficacy on emerged weeds necessitating a follow-up spray.
- Do not apply to crops and weeds stressed by abnormal weather or growing conditions, drought, waterlogged soil, insect damage, nematode infections, diseases, nutritional deficiencies or crops under stress through prior use of other agrochemicals.
- Do not use **TRINITY EC** on crops which already show symptoms of soil borne diseases as the combination of disease and **TRINITY EC** application may result in stand loss.
- Temporary chlorotic spots may occasionally appear on crop leaves, especially if application is followed by very cold/unseasonal weather conditions. Under favourable growing conditions, the crop will recover quickly and yield and quality should not be affected.
- Where protracted germination of grass weeds occur, **TRINITY EC** will only control those grass weeds that have emerged at the time of application.
- A cold spell after a **TRINITY EC** application may slow down the activity of the product.
- The visual effects of **TRINITY EC** on grass weeds will only be seen 14 days after an application. However, no further growth of existing grass weeds occurs after a **TRINITY EC** application.
- Do not apply **TRINITY EC** to any crop or situation not mentioned in this instruction leaflet.
- Only apply **TRINITY EC** using an accurate and safe application technique.
- The crop may be treated at any time when the weeds are in the correct stage, providing that the withholding periods are adhered to.
- Grass weeds must be actively growing and not under drought stress during application as this can limit uptake and translocation. For annual grasses best results are obtained when they are at the 2 - 6 leaf stage.
- Do not apply by aerial application if the neighbouring crops are grain crops or grass pastures.

DIRECTIONS FOR USE

Use only as directed.

MIXING INSTRUCTIONS

Half-fill the spray tank with suitable water. **TRINITY EC** is most effective when spray water is buffered to a pH of

4.5 – 5.5. The volume of buffer used must be included in the total water volume prior to adding the **TRINITY EC**. Then add the required volume of **TRINITY EC** to the water in the tank while agitating followed by the required quantity of adjuvant. Add the partner remedy as appropriate and then finally add a non-ionic surfactant at the recommended dosage rate. Fill the spray tank to the desired volume. Agitate the mixture to ensure good mixing prior to application. Should tank mixtures with other agrochemicals be made, follow the respective manufacturers' label recommendations. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.** Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

COMPATIBILITY

The compatibility of **TRINITY EC** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used. As formulations change from time to time it is recommended that a physical compatibility test be done prior to the tank mixture being made. **TRINITY EC** is compatible with many other agrochemicals used in wheat and barley but small tests should always be done prior to large scale applications.

APPLICATION METHODS

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application.

Ground application:

Knapsack sprayers or tractor mounted boom sprayers may be used. A spray volume of 200 – 250 l/ha should be used for ground application and can be applied via flat fan nozzles (directed forwards).

Constant agitation throughout the spray operation is essential. Only clean water should be used. Prevent overdosing by avoiding overlapping of swaths and closing the nozzles while starting, slow movement, turning and stopping.

Aerial application:

Aerial application of **TRINITY EC** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 0118 (Aerial Application of Agricultural Pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- **Volume:** A spray mixture volume of 30 – 50 litre per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aurally at a lower volume rate than recommended above.
- **Droplet coverage:** 40 to 60 droplets per cm² must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 250 to 300 microns is recommended. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- **Flying height:** Maintain the height of the spray boom at 3 metres above the target. Do not spray when aircraft dives, is in a climb or when banking
- Use suitable atomising equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15 km/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - a) reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).

- b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the Aerial Spray Operator knows exactly which fields to spray.
- Obtain an assurance from the Aerial Spray Operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

RECOMMENDATIONS

Application rate of TRINITY EC in the Winter Rainfall region on wheat and barley

WEED	WEED STAGE	RATE OF TRINITY EC PER HECTARE	
		GROUND	AERIAL
Common wild oats (<i>Avena fatua</i>) Darnel (<i>Lolium tementulum</i>)	2 – 4 leaf	2.0 – 2.25	2.5 – 2.75

Application rate of TRINITY EC in the Summer Rainfall region on wheat under irrigation

<i>Avena fatua</i> (Common wild oats)	2 – 4 leaf	2.0	2.4
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Remarks

- A loss in efficacy can be expected if:
 - applications are made after the above mentioned leaf stages.
 - applications are made to the weeds when they are not actively growing i.e. cold spells, high temperatures, dry periods, etc.
 - poorly controlled wild oats are sprayed a second time.
- The application of **TRINITY EC** to weeds beyond the recommended growth stages might result in inferior control and a reduction in yield.
- Weeds that are overshadowed by other weeds or the crop, will not be controlled due to insufficient coverage.
- A second application of **TRINITY EC** may be necessary to control grass weeds which have **not germinated** by the time of the first application.
- Add a non-ionic surfactant such as Zap or Solitaire to the spray mixture at the recommended rate. Crop and weeds must be actively growing and in suitable growth stages at the time of application.
- The application of **TRINITY EC** prior to the 2 – 4 leaf stage of wild oats may result in re-germination.