

TRIFLUREX[®] 480 EC


Reg. no. L5350 Act/Wet 36 of/van 1947
N-AR 0495



READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS

GROUP	3	HERBICIDE
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<p>A selective emulsifiable concentrate herbicide for pre-plant soil incorporation for the control of annual grasses and some broadleaf weeds in crops as indicated.</p>	<p>'n Selektiewe, emulgeerbare konsentraat onkruidodder wat voor plant in die grond ingewerk word vir die beheer van eenjarige grasse en sommige breëblaaronkruid in gewasse soos aangedui.</p>
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 <p>WARNING</p>	<p>Hazard statements Flammable liquid and vapour. Causes skin irritation. May cause allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer. Very toxic to aquatic life with long lasting effects.</p> <p>Precautionary statements Wear protective gloves, protective clothing, and eye and face protection. Do not breathe vapour, fumes, spray or mist.</p>
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ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

trifluralin 480 g/L trifluralin
(dinitroaniline) (dinitroanilien)

NET VOLUME/NETTO VOLUME

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REGISTRATION HOLDER/REGISTRASIEHOUER

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UN no: 1993

CONTACT IN EMERGENCY/KONTAK IN NOOD

Griffon Poison Information Centre: +27 82 446 8946
Tygerberg Poison Information Centre: +27 21 931 6129

Batch number
Date of manufacture
Expiry date

Lotnommer
Datum van vervaardiging
Vervaldatum

WARNINGS

- Flammable liquid and vapour.
 - Causes skin irritation.
 - May cause allergic skin reaction.
 - Causes serious eye irritation.
 - Suspected of causing cancer.
 - Very toxic to aquatic life with long lasting effects.
- Could be harmful if swallowed.
 - Store in a cool place, away from food, feeds, seed, fertilizer and other agricultural remedies.
 - Do not allow to freeze.
 - If swallowed do not induce vomiting since product contains an aromatic hydrocarbon solvent.
 - Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing

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 climatic and storage conditions; quality of dilution water; compatibility with other substances not indicated on the label and the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damages to crops, vegetation, and 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

PREVENTION

- Obtain, read and follow all safety instructions before use.
- Wear protective gloves, protective clothing, and eye and face protection.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Ground and bond container and receiving equipment and take action to prevent static discharge.
- Use explosion proof electrical, ventilation, lighting, other equipment and non-sparking tools.
- Keep container tightly closed.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash hands and face thoroughly after handling and do not touch eyes.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace

RESPONSE

- If exposed or concerned, get medical advice.
- Rinse mouth.
- IF ON SKIN OR HAIR: Take off immediately all contaminated clothing. Rinse affected area/s under the safety shower.
- If skin irritation or rash occurs: Get medical help.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical help.
- Take off contaminated clothing and wash it before reuse.
- In case of fire, use the available equipment to extinguish the fire.
- Collect spillage.

STORAGE

- Store locked up.
- Store in a well-ventilated place and keep cool.

- Do not eat, drink or smoke while applying or mixing or before washing hands and face and change of clothing
- Prevent contamination of food, feed, drinking water and eating utensils.
- Invert the empty container over the spray tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Rinse the empty container three times with a volume of water of at least 10% of that of the container. Add the rinsate to the spray tank. Perforate and flatten the empty container and do not re-use for any other purpose.
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Clean applicator after use and dispose of wash water where it will not contaminate food, grazing, rivers or dams.

RELEVANT SUBSTANCES

Chemical name	Weight %	CAS no.
Trifluralin (96%)	48.5%	1582-09-8
Xylene	30–60%	1330-20-7
Ethyl Benzene	<10%	100-41-4
Calcium Dodecyl Benzene Sulphonate	<10%	90194-26-7



FIRST AID

Acute exposure to **TRIFLUREX® 480 EC** may require decontamination and life support for the victims. Provide this label and SDS to medical personnel for treatment. Immediately remove contaminated clothing and move the affected person away from the contamination area. Keep the person warm, calm, and covered up. First aid personnel should pay attention to their own safety. Take the container label or product name with you when seeking medical attention.

Eye contact: Immediately rinse/flush the eyes gently with water from the eye wash fountain for several minutes (at least 15 minutes), while holding the eyelids apart. Check for and remove contact lenses if easy to do so. Continue rinsing. Obtain medical attention if irritation occurs and persists.

Skin contact: Remove all contaminated clothing and shoes. Rinse the skin immediately with plenty of water for 15 to 20 minutes under the safety shower. Contact a poison control centre or medical practitioner if irritation occurs or persists. Wash contaminated clothing before re-use.

Inhalation: Immediately remove the affected victim from exposure to an area with fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the product; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Obtain medical attention if concerned or unwell.

Ingestion: Obtain immediate medical attention or call a poison control center or medical practitioner for treatment advice. If conscious, rinse mouth thoroughly with water. Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting unless directed to do so by a medical professional. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits, rinse mouth and administer more water.

TOXICOLOGICAL INFORMATION

Antidotes

No specific antidote. Treat symptomatically and supportively.

Symptoms of human poisoning

Acute health effects: None known.

Symptoms of exposure to the product could include redness and pain to the skin and eyes. Nausea and vomiting.

Long-term effects: Skin sensitization (allergic skin reaction).

NOTICE TO THE USER: This agricultural remedy is to be used only according to the directions of this label. It is an offense under the Act to use this product inconsistent with the directions on the label.

RESISTANCE WARNING

TRIFLUREX® 480 EC is a member of the dinitroaniline group of herbicides, HRAC Herbicide Group Code 3. Some naturally occurring weed biotypes resistant to **TRIFLUREX® 480 EC** and other herbicides belonging to Group Code 3 herbicides may exist through normal genetic variability in any weed population. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by **TRIFLUREX® 480 EC** and other Group Code 3 herbicides.

To delay the selection of resistant weeds, the following steps can be taken:

- Integrate tillage or other mechanical control methods (including non-selective herbicides during the fallow period) into weed control programmes whenever practical.
- Avoid the repeated use of products in the same mode of action group. Plan crop rotations to allow use of herbicides from different mode of action groups.
- For further advice on the prevention of herbicide resistance, contact your local ADAMA South Africa representative.

MODE OF ACTION

Inhibition of microtubule assembly (cell division and growth).

USE RESTRICTIONS

General

In addition to the crops mentioned below, the following crops may also be planted directly after a treated field has been harvested: beetroot, brassicae, carrots, castor oil, celery, cowpeas, cucurbits, fruit trees, mint, okra, potatoes, safflower, sugarcane and tomatoes. All other crops need a waiting period of at least 12 months between treatment and planting, except for grain sorghum, which is 18 months. Periods of cold weather after planting the crops may lead to phytotoxicity, e.g. in the case of early season plantings.

Wheat and barley

TRIFLUREX® 480 EC can be used in wheat and barley provided the following conditions are met:

- **TRIFLUREX® 480 EC** can only be applied if the Ausseeder DBS (Ausplow) or planters with a similar mode of action is used to plant the seed.
- The planter must throw the **TRIFLUREX® 480 EC** treated soil away from the plant row to cover the inter-row areas. Care should therefore be taken that planting speed and row spacing is such that the inter-row is covered by the soil that is removed from the row but that the treated soil is not thrown back in the next plant row.
- Do not use **TRIFLUREX® 480 EC** in areas with steep slopes where the possibility exist that treated soil may roll into the plant row.
- Do not use in very stony areas
- Apply **TRIFLUREX® 480 EC** on a well prepared seedbed, free of excessive plant material and clods.
- **TRIFLUREX® 480 EC** is an excellent graminicide and must be removed completely from the plant row before planting. Failure to do this might lead to crop damage.

DIRECTIONS FOR USE

Use only as directed.

TRIFLUREX® 480 EC is easily decomposed by sunlight and must therefore be incorporated into the soil immediately (within 10 minutes) after it has been sprayed evenly onto the surface in about 150–500 L water/ha at low pressure. The most advantageous method is to mount the spray boom in front of the tractor and pull a disc-harrow or in the case of wheat and barley, the planter with the same tractor.

INCORPORATION

Crops other than wheat and barley

It is important to incorporate very thoroughly into the top 5–10 cm of soil. Set the disc to penetrate to a depth of 10–15 cm. In the case of groundnuts, a slightly shallower incorporation is necessary for 3–5 cm with disc set to penetrate to a depth of 6–10 cm. In the case of groundnuts set the disc to a depth of 6–10 cm to incorporate to a depth of 5 meter. In the incorporation with implements set to cut less than 5 cm deep may give erratic weed control. Thorough incorporation may be achieved with P.T.O. driven rotary tillers or an offset or tandem disc (alone or with spike/tooth harrow in tandem), disking the field twice, the second time at right angles with the first time. Clods must be broken up because the weed seeds in untreated clods may germinate unaffected. **TRIFLUREX® 480 EC** has a long residual action and may be incorporated at any convenient time from 2–3 weeks before planting time, before the rush spring season starts up to the day of planting. **TRIFLUREX® 480 EC** will not leach out of the soil, not even under conditions of high rainfall or irrigation. **TRIFLUREX® 480 EC** may stunt or even reduce the stand of cotton seedlings affected by soil borne disease. To control seedling diseases apply a fungicide in the planting row and use treated seed.

Wheat and barley

The most effective way to apply **TRIFLUREX® 480 EC** in the case of wheat and barley is to apply it overall with a boom spray on the same tractor that is used to pull the planter. Application can also be done by spraying with a separate tractor and followed by the planter provided that not more than 10 minutes lapse between application and incorporation with the planter.

APPLICATION RATES

CROP AND TARGET	SOIL CLAY %	DOSAGE/HA	REMARKS
Groundnuts Natal Common and other Spanish upright types	0–10	0.75 L	Apply before planting and incorporate in the soil within 10 minutes. The treated fields may be weeded mechanically and tilled lightly during the season without affecting the efficacy of TRIFLUREX® 480 EC adversely.
	11–20	1.0 L	
Canola	0–10	1.0 L	Apply before planting or sowing and incorporate within 10 minutes. Can be used in situations where canola is planted or sown for the control of mainly <i>Lolium</i> spp. (ryegrass). For improved control of mainly broad leaf weeds and some grasses in triazine-resistant Canola, TYLSIMEX 500 SC or SIMANEX® 500 SC
	11–20	1.5 L	
	> 20	2.0 L	



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CROP AND TARGET	SOIL CLAY %	DOSAGE/HA	REMARKS
			can be used as a follow on application direct after planting at a rate of 2.0 L/ha
Cotton, dry beans, cow peas, carrots, sunflowers, transplanted cabbages, tomatoes, chilies	0–15 16–35 36–55	1.0 L 1.5 L 2.0 L	Apply before planting or transplanting and incorporate in the soil within 10 minutes. The treated fields may be weeded mechanically by a light cultivation without affecting TRIFLUREX® 480 EC adversely.
Stone fruit, pome fruit, vineyards, guavas, citrus, macadamias, pecans	0–30	8.0 L	Overall application before the establishment of nurseries and orchards. Use accordingly less for band treatment.
Wheat and barley Southern and Western Cape	0–25	1.0–2.0 L	Apply as an overall application and incorporate by a suitable planter as is described in the section under “USE RESTRICTIONS” within 10 minutes. Do not use in fields which was sown with wheat and barley but ONLY in fields which are planted. Use the higher rate where a high infestation of <i>Lolium</i> spp. is expected. The control of other grasses than <i>Lolium</i> spp. might be unsatisfactory and should be controlled with other herbicides from a different chemical group.

WEEDS NORMALLY CONTROLLED BY TRIFLUREX® 480 EC

Grass weeds

BOTANICAL NAME	COMMON NAME
<i>Brachiaria eruciformis</i>	sweet signal-grass
<i>Bromus unioloides</i>	rescue grass
<i>Cenchrus incertus</i>	mat sandbur
<i>Chloris virgata</i>	feathertop chloris
<i>Dactyloctenium aegyptium</i>	common crowfoot
<i>Digitaria sanguinalis</i>	crab fingergrass
<i>Digitaria ciliaris</i>	tropical fingergrass
<i>Echinochloa crus-galli</i>	barnyard grass
<i>Echinochloa colona</i>	marsh grass
<i>Eleusine indica</i>	goose grass
<i>Eragrostis cilianensis</i>	stink love grass
<i>Eragrostis aspera</i>	rough love grass
<i>Lolium spp</i>	rye grass
<i>Panicum shinzii</i>	sweet buffalo grass
<i>Poa annua</i>	winter grass
<i>Seteria pallide-fusca</i>	garden bristle grass
<i>Setaria verticillata</i>	bur bristle grass
<i>Sorghum halepense</i>	Johnson grass (from seed)
<i>Tragus racemosus</i>	Stalked bristle grass
<i>Urochloa panicoides</i>	garden Urochloa



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Broadleaf weeds

BOTANICAL NAME	COMMON NAME
<i>Amaranthus deflexus</i>	perennial pigweed
<i>Amaranthus hybridus</i>	common pigweed
<i>Amaranthus spinosus</i>	thorny pigweed
<i>Amaranthus thunbergii</i>	red pigweed
<i>Chenopodium album</i>	white goosefoot
<i>Polygonum aviculare</i>	prostrate knotweed
<i>Portulaca oleracea</i>	common purslane
<i>Stellaria media</i>	chickweed
<i>Tribulus terrestris</i>	common dubbeltjie