HERBICIDE

Herbi-Thal

Reg. No. L7676 Act No. 36 of 1947

Reg. No. N-AR 1933 Act No. 36 of 1947

READ LABEL BEFORE USE

KEEP OUT OF REACH OF CHILDREN AND ANIMAL

HRAC HERBICIDE GROUP 3

Herbi-Thal 480 SC is a pre-emergence suspension concentrate herbicide for the control of annual grasses and certain broadleaved weeds in crops as listed



WARNING

HAZARD STATEMENTS:

May cause allergic skin reaction. Harmful to aquatic life.

PRECAUTIONARY STATEMENTS:

IF ON SKIN: Wash with plenty of water. Avoid release to the environment.

ACTIVE INGREDIENT

Chlorthal-dimethyl (phthalic acid compound) 480 a/l

Registration Holder: Rolfes Agri (Pty) Ltd.

Emergency contact details Office Hour Poisoning Helpline Rolfes Agri (Pty) Ltd. Tel: +27 (12) 803 0145

(Reg. No. 1998/013411/07) • 288 Mundt Street, Waltloo, 0184 Gauteng, RSA. • Tel: (012) 803-0145



WARNINGS.

- Do **NOT** plant crops other than onions and cole crops within 12 weeks of application.
- Store in a cool place away from food, feeds, fertilizers and other chemicals.
- Causes eve and skin irritation.
- Keep out of reach of children, uninformed persons and animals.
- Wash out the spray tank thoroughly after use.
- · Do not graze on treated areas or feed plant parts to livestock.
- Applied according to directions and under conditions favourable for good plant growth
 HERBI-THAL 480 SC will not harm crops for which its use is recommended. However
 conditions such as high salt concentrations in the irrigation water or in the soil, seedling
 diseases, cold weather, cold soil conditions, deep planting, excessive moisture or drought
 may injure or weaken crops normally tolerant to HERBI-THAL 480 SC, thereby increasing
 the possibility of herbicide damage. Under any of these conditions, one or more of the
 following may result: crop seedlings dying off, delayed crop development, reduced yields
 or reduced quality.
- The tolerance of all species, cultivars or varieties has not been determined therefore it is advisable to test crop safety on a small area first with new varieties.
- DO NOT apply under weather conditions or with spraying equipment which may cause spray to drift onto nearby susceptible plants / crops, cropping lands or pastures.
- GROÚNDWATER ADVISOŘY. Tetrachloroterephthalic acid, a breakdown product of HERBI-THAL
 480 SC, is known to leach through soil as a result of agricultural and turf uses
 and has been found in groundwater which may be used for drinking water. Users of
 formulated products are advised not to apply HERBI-THAL 480 SC to sand and loamy
 sand soils where the water table (groundwater) is close to the surface and where these
 soils are very permeable, i.e., well drained. Your local agricultural agencies can provide
 further information on the type of soil in your area and the location of groundwater used
 for drinking water.

DISCLAIMER

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 weeds 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:

- If medical advice is needed, have container or label at hand.
- Keep out of reach of children.
- · Read carefully and follow all instructions.
- Avoid breathing fume/gas/mist/vapours/spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective gloves.
- IF ON SKIN: Wash with plenty of water.
- · Specific treatment (see first aid on this Label).
- If skin irritation or rash occurs: Get medical help.
- Take off contaminated clothing and wash it before reuse.
- Empty all contents from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and

send to a recycler.

RELEVANT SUBSTANCES:

Benzisothiazolinone <10% and Polyalkyl naphtalene sulphonate <10%.

RESISTANCE WARNING:

For resistance management, **HERBI-THAL 480 SC** is a group 3 herbicide. Any weed population may contain individuals naturally resistant to **HERBI-THAL 480 SC** and other group 3 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **HERBI-THAL 480 SC** or any other group 3 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 programs.

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

MODE OF ACTION: Selective, non-systemic, acts by inhibiting seed germination. Microtubule assembly inhibition.

DIRECTIONS FOR USE: Use only as directed.

APPLICATION:

- Since HERBI-THAL 480 SC is ONLY effective when applied before weed seed germination
 occurs, the soil should be NEWLY CULTIVATED prior to HERBI-THAL 480 SC application to
 provide a weed-free and uniform surface without clods.
- Best results are obtained when HERBI-THAL 480 SC is applied to WET SOIL or WASHED INTO THE SOIL with sprinkler irrigation immediately after application.
- The volume of irrigation water to be applied depends on the particular soil type and will
 have a direct effect on the efficacy of the product. Do not exceed 10 mm irrigation on light
 sandy soils, because leaching can occur resulting in poor control of germinating weeds.
 However, on heavy clay soils a maximum of 25 mm irrigation can be applied directly after
 application of HERBI-THAL 480 SC.
- HERBI-THAL 480 SC should be applied with a motorized spray pump with adequate and
 efficient agitation. Broadcast application is best achieved with 200 − 500 ℓ of water per
 hectare.
- Spray equipment should be properly calibrated before application. A pressure of ± 200kPa with boom type sprayers is recommended.
- Low temperatures may lead to failure of the product to perform satisfactorily.

RECOMMENDATIONS:

- HERBI-THAL 480 SC controls a wide range of annual weeds by killing germinating seeds.
- Poor, diseased seeds or seedlings may be adversely affected by HERBI-THAL 480 SC.

CROP	SOIL TYPE	APPLICATION RATE ℓ/ha	RECOMMENDATIONS
Onions Seeded	0 – 10 % clay 10 – 20 % clay above 20 % clay	12,0 14,0 16,0	Apply uniformly to the soil after the seed has been sown and covered. See NOTE below.
Transplanted and bulb planted	0 – 10 % clay 10 – 20 % clay above 20 % clay	12,0 14,0 16,0	Apply within one day of transplanting. HERBI-THAL 480 SC can be sprayed directly over the transplants without injury.
Lettuce Transplanted seedlings	0 – 10 % clay 10 – 20 % clay above 20 % clay	12,0 14,0 16,0	Apply within one day of transplanting. HERBI-THAL 480 SC can be sprayed directly over the transplants without injury.
Cole crops (Cabbage, Cauliflower and Brussels sprouts) Transplanted seedlings	0 — 10 % clay 10 — 20 % clay above 20 % clay	12,0 14,0 16,0	Summer rainfall area: Apply within one day of transplanting. HERBI-THAL 480 SC can be sprayed directly over the transplants without injury.

NOTE:

Direct seeded onions:

Direct seeded onions:
The use of HERBI-THAL 480 SC under the following conditions may lead to thinning (reduced stand):
a) If damping-off of seedlings occur.
b) High temperatures.
c) Shallow planting.
d) Soils that tend to form clods.

- e) When buffering or acidifying products containing wetters or penetrators are used.

WEEDS CONTROLLED:

ANNUAL GRASSES:	
Dactyloctenium aegyptium Digitaria sanguinalis Eleusine coracana Eragostis spp. Panicum schinzii Poa annua Setaria verticillata Tragus racemosus Urochloa panicoides	Crowfoot Grass Crab Fingergrass Goose Grass Uei panicum Annual Bluegrass Bur Bristlegrass Carrotseed Grass Garden Urochloa

ANNUAL BROADLEAF WEEDS:	
Amaranthus spinosus	Thorny Pigweed
Chenopodium spp.	Goosefoot
Euphorbia spp.	* Spurge
Physalis angulata	* Wild Gooseberry
Portulaca oleracea	Purslane
Stellaria media	Chickweed

^{*} Require slightly higher application rates under adverse climatic and soil conditions. However, do not exceed 14 ℓ / ha on light, $16~\ell$ / ha on medium and $18~\ell$ / ha on heavy soils.

Galinsoga and other weeds in the Compositae family are generally not satisfactorily controlled.