

2,4-D AMINE 480 SL

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

Reg. No./Nr. L5233, Act No./Wet Nr. 36 of/van 1947
 Botswana: Reg. No./Nr. W130302, Act No./Wet Nr. 18 of/van 1999
 Namibian /Namibiese: Reg. No./Nr. N-AR 1318

A selective hormone-type weedkiller for the control of weeds in maize, grain sorghum, wheat and other cereals, sugarcane, lawns, golf courses and pastures.

'n Selektiewe hormoon tipe onkruid doders vir die beheer van onkruid in mielies, graansorghum, koring en ander graangewasse, suikerriet, grasperke, gholfbane en grasweidings.

GROUP/GROEP	4	HERBICIDE/ ONKRUIDDODER
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ACTIVE INGREDIENT:

(2,4-dichlorophenoxy) acetic acid480 g/ℓ.....(2,4-dichloorfenoksie) asynsuur
 (as the 2,4-D-dimethylammonium salt580 g/ℓ.....(as die 2,4D-dimetielaammoniumsout)

AKTIEWE BESTANDDEEL:

Netto Volume



Net Volume

**DANGER****GHS WARNING STATEMENTS**

May cause an allergic skin reaction.
 Causes severe eye damage.
 Toxic to aquatic life with long lasting effects.

GHS PRECAUTIONARY STATEMENTS

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

**REGISTRATION HOLDER / REGISTRASIEHOUDER:****AECI® Limited / AECI® Beperk**

Reg. No. / Nr. 1924/002590/06

P.O. Box / Posbus 14418

Witfield, 1467

Tel : (011) 823 8000 www.aeciph.com / www.aeciworld.com

IN CASE OF POISONING PLEASE PHONE / IN GEVAL VAN VERGIFTIGING SKAKEL
 0861 555777/ 082 446 8946

Batch No:**Lotnommer:****Date of manufacture:****Datum van Vervaardiging**

UN No. /VN Nr. 3082 –Environmentally hazardous substance, liquid, n.o.s (2, 4-D acid)

Pamphlet

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DANGER

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WARNINGS:

GHS WARNING STATEMENTS:

May cause an allergic skin reaction.
Causes severe eye damage.
Toxic to aquatic life with long lasting effects.

DO NOT GRAZE TREATED AREAS WITHIN 7 DAYS AFTER APPLICATION.

Handle with care.

Harmful when swallowed, inhaled or absorbed through the skin.

Toxic to fish and bees.

Keep out of reach of children, uninformed persons and animals.

Store away from food, feed, seed or other agricultural remedies.

Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing

In case of poisoning – CALL A DOCTOR AND MAKE THIS LABEL AVAILABLE TO HIM.

Aerial application - notify all inhabitants of the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

2,4-D Amine 480 SL is a highly active herbicide that in small quantities, when used incorrectly, can cause serious damage to crop seedlings, deciduous fruit trees and grapevines during the budding and early season growth stages. Under the following conditions it can cause serious damage as far as 3 to 5 km from the nearest spray path of the aircraft. Cloudy weather with relative humidity above 80% and low air movement of less than 5 km per hour. When such conditions prevail, aerial application should NOT be carried out where crop seedlings, deciduous fruit trees and grapevines, in budding or early season growth stages, are present within 5 km of the nearest spray path of the aircraft.

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 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:

GHS PRECAUTIONARY STATEMENTS:

Wash thoroughly after handling.

Do not eat, drink, or smoke when using this product.

Wear protective gloves, protective clothing, eye protection and face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER/doctor if you feel unwell.

Dispose of contents/container in accordance with local regulation.

Do not inhale the fumes or spray mist.

Avoid contact with eyes and skin.

Wash contaminated clothing after use.

Prevent contamination of food, feeds, drinking water and eating utensils.

Prevent spray drift onto other crops, grazing, rivers, dams and other areas not under treatment.

Clean applicator thoroughly before using it with other material and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.

Let solution stand for several hours, preferably overnight. Rinse at least twice. This applicator should not be used for applying chemicals other than herbicides.

Triple rinse the empty container: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

RELEVANT SUBSTANCES:

Substance name (IUPAC/EC)	Concentration % by weight	Classification
		EC1272/2008
2, 4-D acid (present as the dimethylamine salt)	40-50%	Skin sensitization (Category 1) H31. Serious eye damage (Category 1) H318. Aquatic chronic 2 H411.

NOTE: The other ingredients not included above, do not cause or contribute towards the correct GHS classification of **2,4-D AMINE 480 SL** and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021; Regulation 14(b), not listed.

FIRST AID TREATMENT

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation occurs.

In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

In case of ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

NOTE TO PHYSICIAN

No specific treatment – treat symptomatically

USE RESTRICTIONS:

To prevent damage, do not permit drift, vapour or spray mist to come into contact with sensitive broadleaf crops, fruit or ornamentals. Apply the product strictly in accordance with the application directions.

THE WIND SPEED AND DIRECTION AT THE TIME OF APPLICATION WILL DETERMINE THE DISTANCE WHICH MUST SEPARATE THE CLOSEST EDGE OF THE AREA TO BE SPRAYED FROM SUSCEPTIBLE CROPS.

WIND SPEED km/h	AERIAL APPLICATION	GROUND APPLICATION
1,5 - 5	800 m downwind 800 m crosswind 15 m upwind	200 m downwind 200 m crosswind 6 m upwind
5 - 10	1 600 m downwind 800 m crosswind 15 m upwind	400 m downwind 200 m crosswind 1.5 m upwind
10 - 15	3,2 km downwind 800 m crosswind 15 m upwind	800 m downwind 400 m crosswind 1,5 m upwind
Above 15	Prohibited	Prohibited

RESISTANCE WARNING:

For resistance management, **2,4-D Amine 480 SL** is a group code 4 herbicide. Any weed population may contain individuals naturally resistant to **2,4-D Amine 480 SL** and other group code 4 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. The resistant weeds may not be controlled by **2,4-D Amine 480 SL** or any other group code 4 herbicides.

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.

MODE OF ACTION:

2,4-D act as synthetic auxin (acting like indolylacetic acid).

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

Do not apply to land adjacent to susceptible crops.

May be applied by air, tractor or by hand sprayers on land in the vicinity of susceptible crops, provided adequate precautionary measures are taken to avoid spray drift.

MIXING INSTRUCTIONS:

2,4-D Amine 480 SL selective weedkiller must be diluted with water and applied as an evenly distributed fine spray. The exact amount of water to be used will be obtained when not less than 200 l of the mixture per ha is used. Always calibrate the spraying equipment before use in order to ascertain the exact quantity of spray delivered per ha.

METHOD OF APPLICATION:**Ground Application:**

Avoid fine droplet size - use low pressure flat fan nozzles of 80° or equivalent anti-drift type, and do not exceed spray pressure of 200 kPa.

Spray volume must exceed 150 l/ha.

Do not exceed spray height of 50 cm above target and ground speed of 10 km/h.

Do not apply if wind velocity exceeds 15 km/hour (as measured by handheld wind recorder approved by the Registrar: Act No. 36 of 1947)

The difference between the wet and dry bulb readings on a whirling hygrometer must not exceed 8 °C.

Post-emergence Application:

Spraying should only be carried out when the crop is in a suitable stage of development as indicated below.

For the best results, weeds should be sprayed when in the young stages and growing vigorously. As they mature the rate of application should be increased accordingly, but the prescribed rates must not be exceeded. When in flower, most weeds are resistant to normal application. Rainfall after 12 hours of application will not reduce the effectiveness of the weedkiller.

AERIAL APPLICATION: (Do not apply 2,4-D Amine 480 SL by air in KwaZulu-Natal)

Aerial application may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Remedies). It is important to 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 are met:

Equipment:

Use a conventional boom and nozzles equipped with flat fan tips that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product through drift.

The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.

All nozzles / atomisers should be positioned within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.

Application parameters:

A minimum volume of 30 ℓ spray mixture 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 aerially at a lower volume rate than recommended above.

A droplet coverage of 30-40 droplets per cm² must be recovered at the target.

A droplet spectrum with a VMD (Volume Median Diameter) of 300-350 microns is recommended.

Ensure that the production of fine droplets (smaller than 150 microns) is restricted to a minimum.

The use of a suitable drift retardant and/or low drift nozzles (e.g. straight stream nozzles) is recommended.

In case of fixed-wing aircraft flying at a speed faster than 130 mph, the maximum deflection angle of nozzles or spray stream, as measured from a horizontal straight backwards orientation, may not exceed 30 degrees. In the case of slower flying fixed wing aircraft, the maximum deflection angle as described above, may not exceed 55 degrees.

The height of the spray boom should be maintained at 3-4 metres above the target. Do not spray when aircraft is in a climb, at the top or during a dive, or when banking.

Apply before the crop becomes too dense, thus preventing proper coverage of the weeds.

Meteorological conditions:

The difference between the wet and dry bulb readings as determined by a whirling hygrometer, must not exceed 8 °C

Do not spray under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur.

Do not spray under temperature inversion conditions (spraying in or above the inversion layer).

Do not spray if the wind speed exceeds 15 km/h.

General:

Ensure that fields are accurately marked and 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.

APPLICATION TABLE:

CROP	DOSAGE RATE (ℓ/ ha)	REMARKS
BARLEY AND RYE	1,5 - 2,6 ℓ	Apply when the crop is in the 5 to 7 leaf stage. Use the higher rate for severe weed pressure or less susceptible weed stage.
LAWNS AND GOLF COURSES	3,3 - 4,4 ℓ	Apply once the grass has become established. For lawns repeated applications may be necessary. An application of nitrogenous fertilizer 2 - 3 weeks before spraying is recommended.
GRAIN SORGHUM (post-emergence only)	2 ℓ	Apply when plants are 150 mm high or about 3 weeks after emergence of the crop. Spray may be applied later provided directional spraying using drop arms is practiced.
GRASS PASTURES	3,3 - 4,4 ℓ	Apply once grass is growing well. Repeat if necessary.
MAIZE (post-emergence) After 30 to 45 cm height	2 ℓ	Grasses which have already emerged will not be controlled. NB: Drop arms must be used for directional spraying, so that the spray does not land in the funnel of the maize plants. <i>Striga asiatica</i> should be sprayed when the first flowers are noticed. The addition of BIODEW (Reg. No. L8120), a spreader/sticker is recommended. Maize may become malformed and brittle after application but this is usually of a temporary nature.
SUGARCANE (post-emergence only)	5,25 - 7,25 ℓ	Apply in 300 – 400 ℓ water/ha. If the sugarcane exceeds a height of 400 mm or has unfurled more than 5 leaves per shoot, directed spraying must be carried out or else the growth may be retarded.
WHEAT (post-emergence only)	1,35 - 2,7 ℓ	Apply between growth stages 7 (centre double ridges enlarged) and 13 (awn of top spikelets elongated) according to the list of growth stages of the ARC Small Grain Institute at Bethlehem.

BROADLEAF WEEDS CONTROLLED:

The following weeds are normally controlled by **2,4-D Amine 480 SL** at the dosage rates indicated above.

<i>Amaranthus deflexus</i>	perennial pigweed
<i>Arctotis leiocarpa</i>	Karoo daisy
<i>Bidens formosa</i> => <i>Cosmos bipinnatus</i>	cosmos
<i>Bidens pilosa</i>	blackjack
<i>Chenopodium album</i>	white goosefoot
<i>Commelina benghalensis</i>	Benghal wandering Jew
<i>Datura stramonium</i>	thorn apple
<i>Galinsoga parviflora</i>	gallant soldier
<i>Polygonum aviculare</i>	prostrate knotweed = hogweed
<i>Raphanus raphanistrum</i>	wild radish
<i>Striga asiatica</i>	witch weed
<i>Tagetes minuta</i>	khaki weed
<i>Tribulus terrestris</i>	Devils thorn = Dubbeltjie
<i>Vicia sativa</i>	broad-leaved purple vetch
<i>Xanthium strumarium</i>	cocklebur

GRASS WEEDS CONTROLLED:

<i>Eleusine indica</i> => <i>Eleusine coracana</i> (pre-emergence)	goose grass
<i>Panicum laevifolium</i> => <i>Panicum schinzii</i> (pre-emergence)	sweet buffalo grass

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