



Dow AgroSciences

TORDON™ 22K



HERBICIDE

Reg No L6871 Act/Wet 36/1947

A RESIDUAL, WATER SOLUBLE, SYSTEMIC HERBICIDE ACTING THROUGH THE LEAVES, ROOTS AND CUT SURFACES, FOR THE CONTROL OF CERTAIN WOODY PLANTS, AS LISTED, IN GRAZING, CONSERVATION AREAS AND ON NON-CROP LAND.

'N NAWERKENDE, WATEROPLOSBARE, SISTEMIESE ONKRUIDDODER WAT DEUR DIE BLARE, WORTELS EN GESNYDE OPPERVLAKTES WERK, VIR DIE BEHEER VAN SEKERE HOUTAGTIGE PLANTE, SOOS AANGETOON, IN WEIDINGS, BEWARINGSGBIEDE EN OP LANDE WAAROP GEWASSE NIE VERBOU WORD NIE.

HERBICIDE GROUP CODE

O

ONKRUIDDODER GROEPKODE

**BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY/
LEES ETIKET NOUKEURIG VOORDAT HIERDIE PRODUK GEBRUIK WORD.**

Active ingredient / Aktiewe Bestanddeel

Picloram (as the Potassium salt) 240 g/l Pikloram (as die Kaliumsout)

NET VOLUME l NETTO VOLUME

REGISTRATION HOLDER / REGISTRASIEHOUER

DOW AGROSCIENCES SOUTHERN AFRICA (PTY) LTD / (EDMS) BPK
REG NO 1967/007147/07
PRIVATE BAG X160 PRIVAATSAK
BRYANSTON 2021

™Trademark of/Handelsmerk van Dow AgroSciences

Batch No. Lot No.

Date of Manufacture Datum van Vervaardiging

UN NO: Not Regulated

Poison Information Helpline: +27(0)861-555-777
Griffon Poison Information Centre: +27(0)82-446-8946
24 Hour Emergency Tel No: 082-887-8079
Information Hotline Tel No: (012) 361-8112

TORDON™ 22K/2016-02-12



**CAUTION
VERSIGTIG**



WARNINGS

Handle with care.

Poisonous when swallowed. May cause eye and skin irritation.

Store in a cool place.

Store away from food, feeds, seeds and other agricultural chemicals.

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

RE-ENTRY INTERVAL: Do not enter treated area until spray deposit has dried on the target plants.

GRAZING RESTRICTIONS:

- Meat animals grazing up to two weeks after treatment should be removed from treated area three days prior to slaughter.
- Do not graze lactating dairy animals on treated area within two weeks after treatment.

GRAZING POISONOUS PLANTS: Herbicide application may increase palatability of certain poisonous plants. Do not graze treated areas until poisonous plants are dry and no longer palatable to livestock.

Aerial application: Notify all inhabitants in the immediate vicinity of the area to be treated and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

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 such factors 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 weed 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

- Do not inhale spray mist.
- Avoid contact with eyes. In case of such contact, flush eyes with clean water for at least 15 minutes.
- Wash with soap and water immediately after accidental skin contact.
- Wash contaminated clothing daily.
- Do not eat, drink or smoke whilst mixing and applying or before washing hands and face and change of clothing.

- Clean applicator with a household ammonia solution (1 %) before using with other material. Let solution stand for several hours, preferably overnight. Rinse at least twice with clean water. This applicator should not be used for applying chemicals other than herbicides. Dispose of wash water where it will not contaminate food, grazing, rivers or dams.
- Rinse 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 contents of the spray tank before destroying the container by perforation and flattening and **NEVER** use for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

USE RESTRICTIONS

TORDON™ 22K is toxic to some plants at very low concentrations so precautions for avoiding injury to non-target plants are:-

- **Do not permit spraymist to drift** or come into contact with sensitive broadleaf crops, including but not limited to lucerne, beans, melons, potatoes, soyabean, sunflower, tobacco, tomatoes, cotton, fruit trees, grape vines, ornamentals, soil containing roots of these plants, soil in which such plants are to be grown, grain varieties in a susceptible stage of growth or grazing or any other area not under treatment.
- **Do not contaminate water intended for irrigation or domestic purposes.** To avoid injury to crops or other desirable plants, do not treat or allow spray or spray drift or spray run-off to fall onto banks or bottoms of irrigation ditches, canals, streams, dams, rivers, either dry or containing water that may be used for irrigation or domestic purposes or may carry water to an irrigation facility.
- **Do not make application when circumstances favour movement from treated site.**
- **Do not apply to areas that may be rotated to any broadleaf crop.**
- **Do not use manure** from animals grazing treated areas on land used for growing already established or yet to be established broadleaf crops, ornamentals, orchards or other susceptible crops. Manure may contain enough picloram to cause injury to susceptible plants.
- **Do not use grass or sprayed plants** from treated areas for composting or mulching of susceptible broadleaf plants or crops.
- **Do not transfer livestock** from treated grazing areas (or feeding of treated grass) onto sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated grass pasture. Otherwise, urine and manure may contain enough picloram to cause injury to sensitive broadleaf plants.
- **Do not use on flood irrigated land or fields.**
- **Do not spray if the loss of forage legumes, including clover, cannot be tolerated.** New legume seedlings may take years to re-establish.
- **Do not move treated soil** to areas other than sites for which **TORDON™ 22K** is registered for use.
- **Do not apply through a mist blower.**

- **Do not apply to land NEAR to desirable broadleaved plants** or land onto which such plants are to be grown or grain varieties in a susceptible stage of growth. May, however, be applied in the VICINITY of desirable broadleaved plants, or soil or land onto which such plants are to be grown, or grain varieties in a susceptible stage of growth, PROVIDED THAT ADEQUATE PRECAUTIONARY MEASURES ARE TAKEN TO AVOID SPRAYDRIFT.(See Wind Speed Table below) OR CONTAMINATION OF RUN-OFF AREAS.
- Apply the product strictly in accordance with the application directions.

Do not apply by air in the province of KwaZulu-Natal.

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 PLANTS AND CROPS.

WIND SPEED km/h	GROUND APPLICATION	AERIAL APPLICATION
2 - 15	2,0 km downwind 2,0 km crosswind 1,0 km upwind	5,0 km downwind 5,0 km crosswind 2,0 km upwind
Above 15	Prohibited	Prohibited

DIRECTIONS FOR USE

- **USE ONLY AS DIRECTED**

TIMING OF APPLICATION

POISON LEAF (GIFBLAAR)

For optimum control apply **TORDON™ 22K** only when the CURRENT SEASON'S GROWTH IS FULLY DEVELOPED, but before the leaves start to turn yellow in the early autumn.

In this respect it is recommended that spraying should not be undertaken before November, by which time most of the new stems will have emerged and produced mature leaves.

Spraying earlier in the spring, when most of the new growth present consists of recently emerged stems with immature leaves, will result in unsatisfactory control.

Do not apply **TORDON™ 22K** if more than 25 % of the foliage has been destroyed by caterpillars or other insects.

Any regrowth found in the second season after the application should be resprayed.

When spraying old stems which have not yet produced leaves also spray surrounding soil for at least 30 cm from stem.

OTHER SPECIES

Apply **TORDON™ 22K** only on actively growing plants and when soil moisture is favourable to plant growth.

Apply only when the trees are in the correct stage of development, as indicated below

- ❖ only spray trees of which leaves have fully developed.
- ❖ spray only on healthy and vigorously growing trees.
- ❖ spray only on trees with full foliage cover.
- ❖ do not apply to wet foliage.
- ❖ do not spray following a late frost.
- ❖ deciduous plants may drop their leaves when under stress. Do not spray target plants when drought signs are evident or showing signs of stress. Caution must be taken when applying foliar applications to deciduous plants during autumn to prevent rapid leaf drop as a combination of stress and herbicide application. Should this occur, provision should be made for follow-up treatments.
- ❖ After a drought some plant species remain under stress and require a recovery period following rainfall. Signs of stress may not be evident during this recovery period. Allow time for plants to fully recover after rainfall before applying foliar treatments. Should foliar treatments be applied during this recovery period, provision should be made for follow-up treatments.

METHODS OF APPLICATION

A. AERIAL

Aerial application of **TORDON™ 22K** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SABS Code 10118 (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 to 35 ℓ 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.
- Droplet coverage: 30 to 40 droplets per cm² must be recovered at the target area.

- **Droplet size:** A droplet spectrum with a VMD of 300 to 350 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 to 4 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:
 - reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
 - 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 log that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

B. **GROUND**

a) **Knapsack & Tractor Application**

Knapsack: Avoid fine droplet size - use a knapsack sprayer with a solid cone nozzle, eg. Spraying Systems TG1 (or equivalent type) that will ensure an even coverage of the target area.

Maintain a constant pressure of between 200 - 250 kPa.

Maintain a distance of approximately 50 cm from the target for best coverage.

Knapsack or Tractor: For linear application with knapsack or tractor and boom, apply in sufficient water per hectare to ensure even coverage. This will be 250 – 350 litres spraymix per hectare depending on plant height and weed species. Consult your local Distributor agent for further advice.

b) High Volume Application (Only with a foaming agent)

Use a motorized pump capable of applying pressures of 1,000 - 1,200 kPa - use a Spraying Systems Foamjet FJ 0006 aspirating nozzle, (or equivalent type.) Add commercially available foaming agent as a temporary spray application marker.

c) General

Apply as a complete cover spray to leaves and stems.

Use only on actively growing plants, up to 2 metres in height, with full leaf cover.

Apply sufficient spray mixture to wet foliage till just before the point of run-off.

Do not apply if rain is likely within 3 hours.

Do not apply to wet foliage.

Do not apply if wind velocity exceeds 15 km/h (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.

CUT STUMP TREATMENT

- Apply preferably immediately after felling but definitely within 3 hours.
- **TORDON™ 22K** should not be applied to the stump if surface is wet from rain or dew.
- Apply with a knapsack, as a coarse spray using solid cone nozzle tips (eg. Spraying Systems TG-1, Delavan CE 1 or equivalent type) at 100 kPa, low pressure.
- Do not exceed spray height of 20 cm above target. Do not apply if wind velocity exceeds 15 km/h (as measured by handheld wind recorder). The difference between the wet and dry bulb readings on a whirling hygrometer must not exceed 8 °C.
- Apply according to directions in the table below.

FRILL METHOD

Using an axe, make horizontal, downward angled cuts through the bark to penetrate but not go deeper than into the sapwood, and immediately apply spray mixture into every cut, taking care that it is not wasted on the bark. Cuts should be connected and made around the entire circumference of the trunk as close to the soil surface as possible. Re-treat as necessary.

Warning:

If topkill is obtained but regrowth occurs from the crown, apply **GARLON* 480 EC** (Reg. No. L4916, Act No. 36 of 1947) or **ACCESS™ 240 SL** (Reg. No. L4920, Act No. 36 of 1947) as a foliar spray.

- In the case of trees having multiple stems, treat each stem separately.
- Check for adequate sapflow and bleeding.

MIXING

Mix **TORDON™ 22K** with water and add ACTIPRON SUPER according to instructions for the different plants. Once the spray mixture has been well mixed, no further agitation is necessary.

RATES OF APPLICATION

A. AERIAL APPLICATION

BUSH/SHRUB SPECIES	RATE/ HECTARE	REMARKS
<i>Dichrostachys cinerea</i> (Sickle bush)	2,0 l	See DIRECTIONS FOR USE above. Apply in 30 l water per hectare.
	2,0 l	<u>CDA application:</u> Mix 2.0 l TORDON™ 22K with 2.0 l ACTIPRON SUPER and 6.0 l water. Apply 10 l spray mix per hectare.

FOLIAR TREATMENT – GROUND APPLICATION

NOTE: FOR FOLIAR APPLICATION USING A KNAPSACK, ACTIPRON SUPER SHOULD BE ADDED AT A RATE OF 500 ml/100 LITRES SPRAY MIX (0.5% MIXTURE).

ALIEN BUSH/SHRUB SPECIES	RATE/100 ℓ WATER	REMARKS
<i>Campuloclinium macrocephalum</i> (Pom-pom weed)	350 ml	Apply onto young actively growing plants. Apply sufficient spray mix volume until the point of run-off.
<i>Cirsium vulgare</i> (Scotch thistle)	500 ml	
<i>Eucalyptus grandis</i> (Saligna gum)	375 ml	Coppice Application: When coppice is between 1 - 1,5 m in height apply to leaves and stems ensuring a thorough wetting. Limited re-growth may occur requiring a follow up treatment.
<i>Lantana camara</i> (Lantana)	0,75 - 1,0 ℓ	Use the higher rate for older, previously slashed plants with big stumps.
<i>Rubus cuneifolius</i> (Bramble)	500 ml	<u>High Volume Application</u> Add a foaming agent at a rate of 500 ml/100 ℓ of spray solution.
<i>Parthenium hysterophorus</i> (Demoina weed)	375 - 500 ml	Use the lower rate for plants smaller than 30 cm and the higher rate for bigger plants.
<i>Ulex europaeus</i> (Gorse)	1,0 ℓ	On young actively growing plants up to 1,0 m in height apply sufficient spray mix volume until the point of run-off. Plants higher than 1,0 m should be slashed and regrowth sprayed when not less than 0,25 m high.

INDIGENOUS BUSH/SHRUB SPECIES	RATE/100 ℓ WATER	REMARKS
<i>Dichapetalum cymosum</i> (Poison Leaf)	1,0 ℓ	See DIRECTIONS FOR USE above.
<i>Acacia caffra</i> (Common Hook-thorn) <i>Acacia nilotica</i> (Scented thorn) <i>Acacia robusta</i> (Splendid acacia) <i>Dichrostachys cinerea</i> (Sickle bush) <i>Euclea divinorum</i> (Magic guarri) <i>Lopholeana coriifolia</i> (Lopholeana) <i>Ziziphus mucronata</i> (Buffalo-thorn)	350 ml	<u>Knapsack Application</u> Add ACTIPRON SUPER at a rate of 500 ml/100 ℓ of spray solution. <u>High Volume Application</u> Add a foaming agent at a rate of 500 ml/100 ℓ of spray solution.
<i>Acacia erubescens</i> (Blue thorn) <i>Acacia karroo</i> (Sweet thorn) <i>Acacia tortilis</i> (Umbrella thorn) <i>Terminalia sericea</i> (Silver terminalia)	500 ml	

C. CUT STUMP APPLICATION

ALIEN BUSH/SHRUB SPECIES	RATE/100 ℓ WATER	REMARKS
<i>Acacia dealbata</i> (Silver wattle)	1,5 ℓ	See DIRECTIONS FOR USE above.
<i>Acacia mearnsii</i> (Black wattle)	1,5 ℓ	Add 500 mℓ ACTIPRON SUPER/100 litre spray mix.
<i>Acacia saligna</i> (Port Jackson)	2.0 ℓ	Apply to low cut stumps (10 – 20 cm high) preferably with a single cut surface.
<i>Chromolaena odorata</i> (Paraffin bush)	1.0 ℓ	Apply to complete cut surface of stumps with a diameter or less than 10 cm.
<i>Eucalyptus cladocalyx</i> (Sugar gum)	3.0 ℓ	Where multiple stumps are present, all cut surfaces must be treated.
<i>Eucalyptus dunnii</i> (White gum)	3.0 ℓ	For bigger stumps apply to the cambial region (sapwood) of the cut surface. In all cases, apply until the point of run-off.
<i>Eucalyptus macarthurii</i> (Woollybutt gum)	3.0 ℓ	A follow-up spray as a coppice application may be required.
<i>Eucalyptus smithii</i> (Blackbutt peppermint)	2.0 ℓ	
<i>Eucalyptus grandis</i> (Saligna gum)	1.5 ℓ	
<i>Lantana camara</i> (Lantana)	1.0 ℓ	
<i>Melia azedarach</i> (Syringa)	2.0 ℓ	
<i>Populus canescens</i> (Grey poplar)	2.0 ℓ	
<i>Solanum mauritianum</i> (Bugweed)	1.0 ℓ	
<i>Ulex europaeus</i> (Gorse)	2.0 ℓ	

INDIGENOUS BUSH/SHRUB SPECIES	RATE/100 ℓ WATER	REMARKS
<i>Acacia erubescens</i> (Blue thorn)	2.5 ℓ	Add 2.0 ℓ ACTIPRON SUPER / 100 ℓ spray mix.
<i>Acacia karroo</i> (Sweet thorn)	2.0 ℓ	Apply to low cut stumps (10 - 20 cm high). Apply to complete cut surface until the point of run-off.
<i>Acacia mellifera</i> (Black thorn)	2.0 ℓ	Also apply to the root collar area and soil immediately in contact with the stump
<i>Acacia tortilis</i> (Umbrella thorn)	2.5 ℓ	A follow-up spray as a coppice application may be required.
<i>Colophospermum mopane</i> (Mopane)	2.5 ℓ	
<i>Dichrostachys cinerea</i> (Sickle bush)	2.0 ℓ	
<i>Terminalia sericea</i> (Transvaal silver leaf)	2.5 ℓ	

D. FRILL APPLICATION

ALIEN BUSH/ SHRUB SPECIES	RATE/10 ℓ WATER	REMARKS
<i>Acacia mearnsii</i> (Black wattle)	600 ml TORDON™ 22K + 200 ml ACTIPRON SUPER	See DIRECTIONS FOR USE above. Apply sufficient mixture to fill the frill without unnecessary wastage down the bark.
<i>Eucalyptus grandis</i> (Saligna gum)	200 ml TORDON™ 22K + 50 ml ACTIPRON SUPER	

TORDON™ 22K controls trees and shrubs. Other trees and shrubs that were not present during the development trials with the product may also be controlled to a certain degree. The registration holder does not accept responsibility for unlisted trees and shrubs.

ACTIPRON SUPER (Mineral oil), Reg. No. L5506, Act No. 36 of 1947, is the Trademark of H&R GSP (Pty) Ltd.

24 HOUR EMERGENCY TEL. NO. 082-887-8079

INFORMATION HOTLINE : TEL. NO.: (012) 361-8112

WAARSKUWINGS

Hanteer versigtig.

Giftig indien ingesluk word. Mag oog- en vel irritasie veroorsaak.

Berg in 'n koel plek.

Berg weg van voedsel, voer, saad en ander landbouchemikalieë.

Hou buite bereik van kinders, oningeligte persone en diere.

HERBETREDINGSINTERVAL: Moenie behandelde area binnegaan voordat die spuitstof op behandelde plante afgedroog het nie.

WEIDINGSBEPERKINGS:

- Vir die eerste twee weke na toediening moet slagdiere minstens 3 dae voor slag uit behandelde area onttrek word.
- Moenie diere in laktasie vir melkproduksie binne twee weke na behandeling in behandelde area laat wei nie.

WEI VAN TOKSIESE PLANTE: Onkruidodder behandeling mag die smaaklikheid van sekere toksiese plante verhoog. Moenie behandelde areas laat beweï voordat toksiese plante dood en dus nie meer smaaklik vir diere is nie.

Lugtoediening: Stel al die bewoners in die onmiddellike omgewing van die gebied wat bespuit sal word in kennis en reik die nodige waarskuwings uit. Moet nie oor aangrensende gebiede of water spuit of die spuitnewel toelaat om dit te besoedel nie.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale grond-, klimaats- en bergingstoestande; kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie en die voorkoms van weerstand van onkruide teen die betrokke middel sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie as gevolg van die versuim van die gebruiker om etiketaanwysings na te kom of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.

VOORSORGMAATREËLS

- Moet nie spuitnewel inasem nie.
- Vermoed kontak met oë. In geval van sodanige kontak, spoel oë met skoon water vir ten minste 15 minute lank.
- Was onmiddelik met seep en water na gebruik van die produk of nadat dit per ongeluk met die vel in aanraking gekom het.
- Was besoedelde klere daaglik.
- Moet nie eet, drink of rook tydens vermenging en toediening en alvorens hande of gesig gewas en skoon klere aangetrek is nie.
- Maak spuittoerusting met 'n huishoudelike ammoniakoplossing (1 %) skoon voordat ander plaagdoders, daarmee gebruik word. Laat staan die oplossing vir 'n paar uur, verkieslik oornag. Spoel ten minste tweekeer met skoon water uit. Hierdie spuittoerusting behoort nie gebruik te word vir die toediening van enige ander chemikalieë behalwe onkruidodders. Gooi waswater weg waar dit nie voedsel, weiding, riviere of damme sal besoedel nie.
- Spoel leë houers driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10 % van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer vernietig word deur gate daarin te maak en dit plat te slaan en moet nie vir enige ander doel gebruik nie.
- Voorkom besoedeling van voedsel, voer, drinkwater en eetgerei.

GEBRUIKSBEPERKINGS

TORDON™ 22K is toksies vir sekere plante selfs teen baie lae dosisse. Maatreëls om beskadiging van nie-teiken plante te voorkom is soos volg:-

- **Voorkom dat spuitnewel wegdryf** of in kontak kom met sensitiewe breëblaar gewasse, insluitend, maar nie beperk tot: lusern, bone, waatlemoene, aartappels, sojabone, sonneblomme, tabak, tamaties, katoen, vrugtebome, wingerdstokke, sierplante, gronde waarin wortels van die plante voorkom, grond waarin die plante verbou gaan word, jong graangewasse in vatbare groeistadium, weidings of enige ander area wat nie behandel gaan word nie.
- **Moenie water vir besproeiing of huishoudelike gebruik besoedel nie.** Om beskadiging van gewasse of ander gewenste plante te voorkom, moenie toelaat dat spuitnewel of spuitstof op walle of bodem van besproeiingsvore, kanale, strome, damme, riviere, wat vir besproeiing of huishoudelike gebruik bedoel is, hetsy droog of met water daarin, beland of deur water na besproeiings sisteme afgevoer word nie.
- **Moenie onder toestande wat die beweging van die onkruidoder uit behandelde areas bevorder, toedien nie.**
- **Moenie areas behandel wat moontlik met enige breëblaar gewas geroteer gaan word nie.**
- **Moenie die mis van diere** wat op behandelde areas gewei het vir lande waarop 'n breëblaargewas, sierplante, boorde of enige ander vatbare gewas gevestig is of gevestig gaan word, gebruik nie. Die mis mag genoegsame pikloram bevat om skade aan vatbare plante te berokken.

- **Moenie gras of bespuite plante** uit behandelde areas vir kompostering of deklaag by gevoelige breëblaar plante of gewasse gebruik nie.
- **Moenie lewende hawe van behandelde weidingsareas** (of wat op behandelde gras gevoed het) na areas van gevoelige breëblaar gewasse oorplaas alvorens hulle vir minstens 7 dae op onbehandelde grasweidings gewei het nie. Urine of mis van sulke diere mag voldoende picloram bevat om gevoelige breëblaar plante te beskadig.
- **Moenie op lande of veld wat vloedbesproei word gebruik nie.**
- **Moenie toedien as die verlies van peulgewas weidings, insluitend klawers, nie geduld kan word nie.** Dit mag jare neem voordat nuwe peulplante sal vestig.
- **Moenie behandelde grond** na areas anders as gronde waarop die gebruik van Access geregistreer is, verskuif nie.
- **Moenie met 'n newelspuit (misblaser) toedien nie.**
- **Moenie op grond wat NABY gewenste breëblaar plante** of grond waarop sulke plante groei, of graangewasse wat in gevoelige ontwikkelings stadium is toedien, **mits daar nie voldoende voorsorg getref word om die wegdrywing van spuitnewel na die areas of besoedeling van afloop areas te voorkom nie.** (Sien „Windspoed Tabela“ hieronder)

Dien die produk streng volgens die gebruiksaanwysings toe.

Moet nie uit die lug in die provinsie KwaZulu-Natal toedien nie.

DIE WINDSPOED EN WINDRIGTING TYDENS TOEDIENING SAL DIE AFSTAND TUSSEN DIE NAASTE RAND VAN DIE GEBIED WAT BESPUIT MOET WORD EN DIE GEVOELIGE PLANTE EN GEWASSE BEPAAL.

WINDSPOED km/uur	GRONDTOEDIENING	LUGTOEDIENING
2 - 15	2,0 km windaf 2,0 km dwarswind 1,0 km windop	5,0 km windaf 5,0 km dwarswind 2,0 km windop
Meer as 15	Verbode	Verbode

GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui

TYD VAN TOEDIENING

LOOFBEHANDELING

GIFBLAAR

Vir optimale beheer dien **TORDON™ 22K** toe slegs wanneer die HUIDIGE SEISOEN SE GROEI TEN VOLLE ONTWIKKEL IS maar voor die blare in die vroeë herfs begin geel word.

Dit word daarom aanbeveel dat bespuiting eers vanaf November sal geskied wanneer al die nuwe stamme reeds sou verskyn het en die blare ten volle ontwikkel het.

Bespuiting wat vroeër in die lente geskied, wanneer meeste van die nuwe groei nog uit jong stamme met onvolwasse blare bestaan, sal swak beheer tot gevolg hê.

Moet nie **TORDON™ 22K** toedien as meer as 25 % van die blare deur wurms of ander insekte beskadig is nie.

Enige hergroei wat in die tweede seisoen na bespuiting gevind word, moet weer behandel word.

Wanneer afsonderlike ou stamme wat nog nie blare ontwikkel het nie, bespuit word, moet die omliggende grondoppervlak tot minstens 30 cm vanaf die stam ook bespuit word.

ANDER SPESIES

Dien **TORDON™ 22K** alleenlik op aktief groeiende plante en wanneer grondvog gunstig vir plantegroei is, toe.

Dien slegs toe wanneer die bome in die korrekte ontwikkelings stadium is, soos hieronder aangedui word :

- ❖ spuit bome waarvan die blare ten volle ontwikkel is;
- ❖ spuit slegs op gesonde en lewenskragtige bome.
- ❖ spuit slegs op bome met 'n volle ontwikkelde blaredek.
- ❖ moenie spuit nadat laat ryp in die seisoen voorgekom het nie.
- ❖ moenie op nat blare toedien nie.
- ❖ Bladwisselende bome mag hulle blare onder stremming verloor. Moet nie spuit as teken plante enige droogtetekens of tekens van stremming wys nie. Wanneer blaartoedienings in die herfs op bladwisselende bome gedoen word, moet voorsorg getref word om vinnige blaarverliese a.g.v 'n kombinasie van onkruidododerbehandeling en stressoestande, te voorkom. Indien dit wel gebeur moet daar vir opvolgbespuitings voorsiening gemaak word.
- ❖ Na reën, in opvolging van droogte, sal sekere spesies steeds vir 'n tydperk onder stres verkeer. Al is stressimptome nie altyd opsigtelik nie moet daar eers gewag word, todat die plante herstel het alvorens blaarbespuitings gedoen word. Indien blaarbespuitings wel gedoen word voordat die plante herstel het, moet daar vir opvolgbespuitings voorsiening gemaak word.

TOEDIENINGSMETODE

A. LUGBESPUITING

TORDON™ 22K kan slegs deur 'n geregistreerde Lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SABS Kode 10118 (Aerial Application of Agricultural Pesticides) uit die lug bespuit word. Verseker dat die spuitmengsel eweredig oor die teikenarea versprei word, en die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is daarom belangrik om aan die volgende vereistes te voldoen:

- Volume: 'n Spuitmengsel volume van 30 tot 35 liter per ha word aanbeveel. Hierdie produk is nie teen 'n verlaagde volume getoets nie. Die registrasiehouer kan nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, toegedien word nie.
- Druppelbedekking: 30 tot 40 druppels per cm² moet op die teikenarea herwin word.
- Druppelgrootte: 'n Druppelspektrum met 'n VMD van 300 tot 350 mikrons word aanbeveel. Beperk die produksie van druppels kleiner as 150 mikrons (hoë drywing en verdampingspotensiaal) tot 'n minimum.
- Vlieghoogte: Handhaaf die hoogte van die spuitbalk bo die teiken op 3 tot 4 meter. Moet nie spuit wanneer die vliegtuig duik, uitklim of draai nie.
- Gebruik geskikte atomiseringsapparaat wat die vereiste druppelgrootte en bedekking sal produseer, maar die minste verlies van produk verseker. Die spuitstelsel moet 'n druppelspektrum met die kleinste moontlike Relatiewe Span produseer.
- Plaas al die atomiseerders in die binnste 60 tot 75 % van die vlerkspan om te verhoed dat druppels binne-in die vlervorteks beweeg.
- Die verskil in temperatuur tussen die nat- en droëboltermometer van 'n swaaihigrometer, moet nie 8 °C oorskry nie.
- Stop bespuiting indien die windspoed 15 km/uur oorskry.
- Stop bespuiting tydens turbulente, onstabiele en droë toestande gedurende die hitte van die dag.
- Bespuiting onder temperatuur inversie toestande (deur bo of binne die inversie laag te spuit) en/of hoë lugvog toestande (relatiewe humiditeit 80% en meer) mag tot volgende probleme aanleiding gee:
 - verlaagde effektiwiteit aangesien die druppels as 'n wolk in die lug bly hang en moontlik verdamp (onvoldoende bedekking op teiken).
 - skade aan nie-teiken gewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken area.
- Verseker dat die Lugbespuitingsoperateur presies weet watter lande of gebiede bespuit moet word.
- Dit is noodsaaklik om 'n versekering van die Lugbespuitingsoperateur te verkry dat aan al die bogenoemde vereistes voldoen sal word en dat data van belang in 'n logboek saamgevat is vir toekomstige verwysing.

B. GRONDTOEDIENING

a) Rugsak en Trekker Toediening

Rugsak: Vermy fyn druppelgroottes - gebruik 'n rugsakspuit wat toegerus is met soliede kegelspuitpunte bv. Spraying Systems TG1 (of soortgelyk tipe) wat egalige benatting van die teiken sal verseker.

Handhaaf 'n konstante druk van 200 - 250 kPa.

Handhaaf 'n afstand van ongeveer 50 cm van die teiken om gewenste bedekking te verseker.

Rugsak of Trekker: Vir lineêre toediening met 'n rugsak of trekker met spuitbalk, gebruik 250 – 350 liter water per hektaar afhangend van die planthoogte en spesies, om sodoende 'n eweredige bedekking te verseker. Raadpleeg jou plaaslike Verspreidingsagent vir verdere advies.

b) Hoë Volume Toediening (Alleenlik met 'n skuimmerker)

Gebruik 'n motoraangedrewe pomp wat 'n toedieningsdruk van 1,000 - 1,200 kPa kan handhaaf - gebruik 'n Spraying Systems Foamjet FJ 0006 met 'n lugsuigspuitpunt, (of soortgelyk tipe). Voeg 'n kommersieële beskikbare skuimmiddel as 'n tydelike spuittoedieningsmerker by.

c) Algemeen

Dien as 'n volle dekbespuiting op loof en stamme toe.

Gebruik alleenlik op aktief-groeiende plante met volle blaredrag tot 2 meter in hoogte. Dien voldoende spuitmengsel toe om die loof tot net voor die punt van afloop te benat.

Moenie toedien indien reën binne 3 uur verwag word nie.

Moenie op nat blare toedien nie.

Indien die windspoed hoër as 15 km/uur is (soos bepaal deur 'n handwindmeter goedgekeur deur die Registrateur : Wet Nr. 36 van 1947) moet die produk nie toegedien word nie. Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihigrometer bepaal, moet nie meer as 8 °C wees nie.

STOMPBEHANDELING

- Dien verkieslik onmiddellik na afkap, maar beslis binne 3 uur na afkap toe.
- **TORDON™ 22K** moet nie toegedien word op stompe indien hulle nog weens reën of dou nat is nie.
- Dien met 'n rugsakspuit, as growwe druppels toe deur gebruik te maak van soliede kegelspuitkoppe (bv. Spraying Systems TG-1, Delavan CE 1 of soortgelyke spuitkoppe) en handhaaf 'n druk van 100 kPa, (lae druk).

- Moenie 'n spuithoogte van 20 cm bokant die teiken oorskry nie. Indien die windspoed hoër as 15 km/u is (soos bepaal deur 'n handwindmeter) moet die produk nie toegedien word nie. Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihigrometer bepaal, moet nie meer as 8 °C wees nie.
- Dien toe volgens aanwysings vir stompe en gekapte stompspruiting in tabel hieronder.

RINGULERINGSMETODE

Maak horisontale, skuins kapwonde met 'n byl, net deur die bas tot net in die splinthout van die boom. Dien van die spuitoplossing onmiddellik in elke kapwond toe. Sorg dat die spuitoplossing nie op die bas gemors word nie. Die kapwonde moet aaneenlopend tot die volle omtrek van die stam en so na as moontlik aan die grondoppervlakte, gemaak word. Herbehandel indien nodig.

WAARSKUWING

As alle bogroei doodgemaak is, maar hergroei kom vanaf die kroon voor, dien **GARLON* 480 EC** (Reg. Nr. L4916, Wet Nr. 36 van 1947) of **ACCESS™ 240 SL** (Reg. Nr. L4920, Wet Nr. 36 van 1947) as 'n loofbespruiting toe.

- In die geval van veelvuldige stamme moet elke stam afsonderlik behandel word.
- Maak seker dat die sapvloei voldoende, maar nie oormatig is nie.

VERMENGING

Meng **TORDON™ 22K** met water en voeg ACTIPRON SUPER volgens die aanwysings vir die verskillende plante by. Nadat die spuitoplossing deeglik vermeng is, is geen verdere roering nodig nie.

TOEDIENINGSHOEVEELHEID

A. LUGBESPUITING

BOS-/STRUIK SPESIE	DOSIS/HA	OPMERKINGS
<i>Dichrostachys cinerea</i> (Sekelbos)	2,0 ℓ	Sien GEBRUIKSAANWYSINGS hierbo. Dien in 30 ℓ water / ha toe.
	2,0 ℓ	<u>CDA toediening:</u> Meng 2.0 L TORDON™ 22K met 2.0 ℓ ACTIPRON SUPER en 6.0 ℓ water. Dien 10 ℓ spuitmengsel per hektaar toe.

B. LOOFBESPUITING - GRONDTOEDIENING

OPMERKING: VIR LOOFTOEDIENING DMV 'N RUGSAKSPUIT, MOET ACTIPRON SUPER TEN ALLE TYE BYGEOVOEG WORD TEEN 500 ml/100 LITER FINALE SPUITMENGSEL (0.5% MENGSEL).

UITHEEMSE BOS-/STRUIK SPESIE	DOSIS/100 ℓ WATER	OPMERKINGS
<i>Campuloclinium macrocephalum</i> (Pom-pom onkruid)	350 ml	Dien toe op jong aktief-groeiende plante. Dien genoeg spuitstof volume tot die punt van afloop.
<i>Cirsium vulgare</i> (Skotse dissell)	500 ml	
<i>Ecalyptus grandis</i> (Saligna bloekom)	375 ml	Hergroei Toediening: Wanneer hergroei tussen 1 – 1,5 m hoog is. Dien toe op loof en stamme en verseker deeglike benatting. Beperkte hergroei mag ontstaan wat 'n opvolgbespuiting sal benodig.
<i>Lantana camara</i> (Lantana)	0,75 - 1,0 ℓ	Gebruik die hoër dosis vir ouer, voorheen gekapte plante met groot stompe.
<i>Rubus cuneifolius</i> (Braam)	500 ml	<u>Hoë Volume Toediening</u> Voeg 'n skuimmiddel teen 'n dosis van 500 ml/100 ℓ spuitmengsel by.

UITHEEMSE BOS-/ STRIJK SPESIE (vervolg)	DOSIS/100 ℓ WATER	OPMERKINGS
<i>Parthenium hysterophorus</i> (Demoina onkruid)	375 - 500 mℓ	Gebruik die laer dosis vir plante onder 30 cm hoog en die hoër dosis vir groter plante.
<i>Ulex europaeus</i> (Gorse)	1,0 ℓ	Dien toe op jong aktief-groeiende plante wat tot en met 1,0 m hoog is; Dien voldoende spuitstof, tot die punt van afloop, toe. Plante hoër as 1,0 m moet eers gekap word. Hergroei moet wanneer dit langer as 0,25 m uitgegroeï is, gespuit word.

INHEEMSE BOS-/ STRIJK SPESIE	DOSIS/100 ℓ WATER	OPMERKINGS
<i>Dichapetalum cymosum</i> (Gifblaar)	1,0 ℓ	Sien GEBRUIKSAANWYSINGS voorskrifte hierbo.
<i>Acacia caffra</i> (Gewonehaakdoring)	350 mℓ	<u>Rugsaktoediening</u> Voeg ACTIPRON SUPER teen 'n dosis van 500 mℓ/100 ℓ spuitmengsel by.
<i>Acacia nilotica</i> (Lekkerruikpeul)		<u>Hoë Volume Toediening</u> Voeg 'n skuimmiddel teen 'n dosis van 500 mℓ/100 ℓ spuitmengsel by.
<i>Acacia robusta</i> (Enkeldoring)		
<i>Dichrostachys cinerea</i> (Sekelbos)		
<i>Euclea divinorum</i> (Towerghwarrie)		
<i>Lopholeana coriifolia</i> (Plusiesbos)		
<i>Ziziphus mucronata</i> (Blinkblaar-wag-'n-bietjie)		

INHEEMSE BOS-/ STRIJK SPESIE (vervolg)	DOSIS/100 ℓ WATER	OPMERKINGS
<i>Acacia erubescens</i> (Blouhaak)	500 ml	
<i>Acacia karroo</i> (Soetdoring)		
<i>Acacia tortilis</i> (Haak-en-steek)		
<i>Terminalia sericea</i> (Vaalboom)		

C. GEKAPTE STOMP BEHANDELING

UITHEEMSE BOS-/ STRIJK SPESIE	DOSIS/100 ℓ WATER	OPMERKINGS
<i>Acacia dealbata</i> (Silwerwattel)	1,5 ℓ	<p>Sien GEBRUIKSAANWYSINGS hierbo</p> <p>Voeg 500 ml ACTIPRON SUPER/100 liter spuitmengsel by.</p> <p>Dien toe op laag gekapte stompe (10 – 20 cm hoog), verkieslik met 'n enkele gekapte oppervlakte.</p> <p>Dien toe op die totale gekapte oppervlak van stompe met 'n deursnee van minder as 10 cm.</p> <p>Waar veelvoudige stompe teenwoordig is, moet alle gekapte oppervlakte behandel word.</p> <p>Vir groter stompe, dien op die kambium gedeelte (splinthout) toe. Dien in alle gevalle tot die punt van afloop toe.</p> <p>'n Opvolgbespuiting op hergroei mag benodig word.</p>
<i>Acacia mearnsii</i> (Swart wattel)	1,5 ℓ	
<i>Acacia saligna</i> (Port Jackson)	2.0 ℓ	
<i>Chromolaena odorata</i> (Paraffienbos)	1,0 ℓ	
<i>Eucalyptus cladocalyx</i> (Suikerbloekom)	3.0 ℓ	
<i>Eucalyptus dunnii</i> (Witbloekom)	3.0 ℓ	
<i>Eucalyptus macarthurii</i> (Wolstambloekom)	3.0 ℓ	

UITHEEMSE BOS-/ STRIJK SPESIE (vervolg)	DOSIS/100 ℓ WATER	OPMERKINGS
<i>Eucalyptus smithii</i> (Swartstamperment)	2.0 ℓ	
<i>Eucalyptus grandis</i> (Salignabloekom)	1.5 ℓ	
<i>Lantana camara</i> (Lantana)	1.0 ℓ	
<i>Melia azedarach</i> (Maksering)	2.0 ℓ	
<i>Populus canescens</i> (Vaalpopulier)	2.0 ℓ	
<i>Solanum mauritianum</i> (Luisboom)	1.0 ℓ	
<i>Ulex europaeus</i> (Gorse)	2.0 ℓ	

INHEEMSE BOS-/ STRIJK SPESIE	DOSIS/100 ℓ WATER	OPMERKINGS
<i>Acacia erubescens</i> (Bloudoring)	2.5 ℓ	<p>Voeg 2.0 ℓ ACTIPRON SUPER/100 liter spuitmengsel by.</p> <p>Dien op laag gekapte stompe (10 – 20 cm hoog) toe. Dien op totale gekapte oppervlakte tot die punt van afloop toe.</p> <p>Dien ook toe om die wortelkroonarea en op grond onmiddellik in kontak met die stomp.</p> <p>'n Opvolgbespuiting op hergroei mag benodig word.</p>
<i>Acacia karroo</i> (Soetdoring)	2.0 ℓ	
<i>Acacia mellifera</i> (Swarthaak)	2.0 ℓ	
<i>Acacia tortilis</i> (Haak-en-Steek)	2.5 ℓ	
<i>Colophospermum mopane</i> (Mopane)	2.5 ℓ	
<i>Dichrostachys cinerea</i> (Sekelbos)	2.0 ℓ	
<i>Terminalia sericea</i> (Vaalblom)	2.5 ℓ	

D. RINGULERING BEHANDELING

UITHEEMSE BOS-/ STRIJK SPESIE	DOSIS/10 ℓ WATER	OPMERKINGS
<i>Acacia mearnsii</i> (Swartwattel)	600 ml TORDON™ 22K + 200 ml ACTIPRON SUPER	<p>Sien GEBRUIKSAANWYSINGS hierbo.</p> <p>Dien genoegsame mengsel toe om slegs die ringuleeringswond te vul sonder oormatige oorloop op die bas.</p>
<i>Eucalyptus grandis</i> (Salignabloekom)	200 ml TORDON™ 22K + 50 ml ACTIPRON SUPER	

TORDON™ 22K beheer bome en struike. Ander bome en struike wat nie tydens die ontwikkelingsproewe met die middel voorgekom het nie, kan ook in meerdere of mindere mate daardeur beheer word. Die registrasiehouer aanvaar egter geen aanspreeklikheid ten opsigte van ongelyste bome en struike nie.

ACTIPRON SUPER (mineraal olie) (Reg. Nr. L5506) Wet Nr. 36 van 1947, is die handelsmerk van H&R GSP (Edms) Bpk.

24 UUR NOODGEVAL TEL. NO. 082-887-8079

TEGNIесе NAVRAE/INLIGTING TEL. NO. (012) 361-8112