ANTAGON

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY
ANTAGON
FUNGICIDE
Reg. No./Nr. L8842, Act/Wet No./Nr. 36 of/van 1947
1: 25/01/2012
A suspension concentrate, local acting systemic fungicide with residual effect on crops as listed.
'n Suspensiekonsentraat, lokaal sistemiese swamdoder met 'n nawerkende effek op gewasse soos aangedui.
FRAC FUNGICIDE GROUP CODE
U12
FRAC SWAMDODERGROEPKODE
ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL
Dodine (guanidine)
400 g/ℓ
Dodien (guanidien)
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
20ℓ
UN Number: 3082
Meridian agritech
HARMFUL / SKADELIK
DIRECTIONS FOR USE ENCLOSED
Batch Number
Date of manufacture
REFER TO DETAILS AS PRINTED ON CONTAINER / BAG
GEBRUIKSAANWYSINGS INGESLUIT
Lotnommer
Datum van vervaardiging
VERWYS NA BESONDERHEDE SOOS OP HOUER / SAK GEDRUK

WARNINGS

Allow the following number of days between last treatment and harvest:

Apples, pears and quinces..........…………………………………………………………...14 days

IMPORTANT: The recommended withholding period between last application and harvest meets local residue requirements, but may not meet export requirements.

- Handle with caution
- Harmful if swallowed, inhaled or absorbed through skin.
- In case of poisoning, promptly contact a physician and show this label.
- Keep out of reach of children, uninformed persons and animals.
- May damage eyes.
- May cause irritation of skin as well as of nose and throat membranes.
- **Re-entry** – Do not enter treated area until spray deposit has dried unless wearing protective clothing.
- Store in original or marked container, safely away from food and feeds.
- Toxic to fish and very toxic to other aquatic organisms.
- **Antagon** has been tested on some of the most important commercial cultivars without any phytotoxic effects. More susceptible cultivars may be released in future, which need to be tested; for this apply **Antagon** to a limited test area before commercial applications are made.

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 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 disease 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

- Do not inhale fumes or spray mist.
- Avoid skin and eye contact by wearing protective clothing when mixing the product. Should eye contact occur, flush with plenty of water and get medical attention if necessary.
- For tank mixing with products in fungicide group U, refer to individual labels.
- Wash with soap and water after use and accidental skin contact as well as contaminated clothing.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- 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 empty container by perforation and flattening.
- Do not use the empty container for any other purpose.

FIRST AID TREATMENT

Inhalation may cause respiration difficulty and irritation to eyes.

Eyes : Wash immediately with large amounts of water. If irritation develops consult a physician.
Ingestion : Do not induce vomiting. If conscious, give one or two glasses of water to drink and see a physician immediately.
Inhalation : Remove patient to fresh air immediately.
Skin : Remove contaminated clothing. Do not rub skin. Wash affected area immediately with soap and large amounts of water. If irritation develops consult a physician.

NOTE TO PHYSICIAN
Treat supportively and symptomatically.

RESISTANCE WARNING

For resistance management, **Antagon** is a group code U12 fungicide. Any disease population may contain individuals naturally resistant to **Antagon** and other group code U12 fungicides. The resistant individuals can eventually dominate the disease population if these fungicides are used repeatedly. These resistant diseases may not be controlled by **Antagon** or any other group code U12 fungicide.

To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same fungicide group code. Do not exceed 3 applications per growing season. Alternate or tank mix with registered products from different fungicide group codes.
- A spray programme of mixtures or alternations with remedies with a different mode of action may delay resistant strain build-up.
- Integrate other control methods (chemical, cultural, biological) into disease control programmes.

Since the occurrence of resistance cannot be forecast, users are advised to keep treated crops under close observation. If treatment is not effective following the use of **Antagon** as recommended, a resistant strain may be present. If a resistant strain is positively identified, consideration should be given to prompt use of a fungicide with a different mode of action for which there is no record of resistance to the relevant disease. For specific information on resistance management, contact the registration holder of this product.

USE RESTRICTIONS

- The uptake and activity of systemic compounds can be reduced when crops are under severe drought and/or nutrient stress conditions. Therefore, do not apply **Antagon** under such conditions.
- Spray programmes with **Antagon** should commence before disease/s become established.
- Do not apply **Antagon** to any crop or situation not mentioned in this instruction leaflet.
- Only apply **Antagon** using an accurate and safe application technique.
- If **Antagon** is used in a tank mix with other recommended products, consideration should be given to the restrictions of those respective products.

DIRECTIONS FOR USE
Use only as directed.

Under slow drying weather conditions, there is a probability that the product may cause fruit russetting with special mention to Golden Delicious, Granny Smith and Packham's Triumph. Therefore, it is advisable that the product only be used during the pre-blossom stage on these cultivars. Once the fungicide has dried, it has reasonable rain fastness. After precipitation of 80mm or more, it can be expected that efficacy can be significantly reduced and re-spraying may be needed.

MIXING INSTRUCTIONS

Half-fill the spray tank with suitable water, then add the required amount of **Antagon** to the water in the tank while agitating. Fill the spray tank to the desired volume. Do not use brackish water. Should tank mixtures with other products be made, follow the respective manufacturers' label recommendations. Where wettable powder formulations are used in combination with **Antagon**, a slurry should firstly be made with the powder and some water, mixed into the spray tank and finally the **Antagon** can be added. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank**. Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

COMPATIBILITY

The compatibility of **Antagon** 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**. Antagon** is not compatible with lime, chlorbenzilate, oils, azinphos-methyl and diazinon.

APPLICATION METHODS

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application. Only clean water should be used.

RECOMMENDATIONS

CROP AND DISEASE	RECOMMENDED RATE	REMARKS
Apples Scab (*Venturia inaequalis*) **Pears** Scab (*Venturia pirina*)	**Pre- & post blossom** 120 mℓ /100 ℓ water	Apply the first spray at green-tip (20 tips / tree) and repeat at intervals of 7 to 10 days. Extend intervals to 14 days, 2 weeks after full bloom. Stop application towards beginning of December. Continue spraying in cases of incomplete control and prolonged wet weather. Do not exceed 3 applications per growing season.
Quinces Black spot	**Pre- and post-blossom** 120 mℓ /100 ℓ water	Apply the first spray at green-tip (20 tips / tree) and repeat at intervals of 7 to 10 days. Extend intervals to 14 days, 2 weeks after full bloom. Stop application towards beginning of December. Continue spraying in cases of incomplete control and prolonged wet weather. Do not exceed 3 applications per season.

- The **Antagon** broad spectrum fungicide combinations may be used curatively to supplement a preventative contact fungicide spray programme. Curative applications are only recommended when adequate and reliable disease prediction systems are available. Treatment should be made within 4 days of the onset of an infection period.

WAARSKUWINGS

Laat die volgende aantal dae toe tussen laaste behandeling en oes:

Appels, pere en kwepers .... 14 dae

BELANGRIK: Die aanbevole onthoudingsperiode tussen laaste toediening en oes voldoen aan die vereistes vir plaaslike residuvlakke, maar mag dalk nie voldoen aan vereistes vir uitvoer nie.

- Hanteer versigtig
- Skadelik indien ingesluk, ingeasem of as deur vel geabsorbeer word.
- In geval van vergiftiging, kontak onmiddellik 'n geneesheer en verwys na hierdie etiket.
- Hou buite bereik van kinders, oningeligte persone en diere.
- Mag oë beskadig.
- Mag vel irriteer asook neus- en keelvliese.
- **Herbetreding** - Moet nie behandelde gebied betree alvorens die spuitneerslag droog is nie, tensy beskermende oorklere gedra word.
- Berg in die oorspronklike of 'n gemerkte houer, weg van voedsel en voer af.
- Giftig vir visse en baie giftig vir ander waterorganismes.
- **Antagon** is sonder enige fitotoksisiteitskade op die mees belangrikste kommersiële kultivars getoets. Meer sensitiewe kultivars mag in die toekoms vrygestel word wat eers getoets moet word; hiervoor moet **Antagon** eers op ‘n klein toetsoppervlakte aangewend word, alvorens groot kommersiële bespuitings gemaak word.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie. Die werking en effek daarvan kan beïnvloed 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 die siekte teen die betrokke middel, sowel as deur die metode, tyd en akkuraatheid van toediening. Die registrasiehouer aanvaar geen verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van versuim van die gebruiker om die etiketaanwysings na te kom, of vir die voorkoms van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.

VOORSORGMAATREËLS

- Moenie dampe of spuitnewel inasem nie.
- Vermy vel- en oogkontak deur beskermende klere te dra wanneer die produk gemeng word. Indien oogkontak plaasvind, spoel met baie water en verkry mediese sorg indien nodig.
- Vir tenkmengsels wat gemaak word met produkte in swamdodergroepkode U, verwys na individuele etikette.
- Was met seep en water na gebruik, toevallige velkontak, asook besoedelde klere.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat hande en gesig gewas is nie.
- Voorkom besoedeling van voedsel, voer, drinkwater en eetgerei.
- Vermy wegdrywing van spuitnewel na ander gewasse, weiding, riviere, damme en areas wat nie onder behandeling is nie.
- Maak toedieningsapparaat deeglik skoon na gebruik. Raak ontslae van spoelwater waar dit nie gewasse, weiding, riviere, damme en boorgate sal besoedel nie.
- Spoel leë houer **drie keer** uit met 'n volume water gelykstaande aan' n minimum van 10% van die inhoud van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die leë houer vernietig word deur gate daarin te maak en dit plat te slaan.
- Moet nie die leë houer vir enige ander doeleindes gebruik nie.

NOODHULPBEHANDELING

Inaseming kan asemhalingsprobleme en irritasie aan oë veroorsaak.

Oë	: Was onmiddellik uit met groot hoeveelhede water. Indien irritasie voorkom, raadpleeg 'n geneesheer.
Ingesluk	: Moenie braking induseer nie. Indien nog by bewussyn, gee een of twee glase water om te drink en gaan sien onmiddellik 'n geneesheer.
Inaseming	: Verskuif die pasiënt onmiddellik na vars lug
Vel	: Verwyder besoedelde klere. Moet nie die vel vryf nie. Was die aangetasde vel met seep en groot hoeveelhede water. Indien irritasie voorkom, raadpleeg 'n geneesheer.

NOTA AAN GENEESHEER
Behandel ondersteunend en simptomaties.

WEERSTANDSWAARSKUWING

Vir weerstandsbestuur, is **Antagon** 'n groepkode U12 swamdoder. Enige siektepopulasie mag individue insluit wat 'n natuurlike weerstand teen **Antagon** of enige ander groepkode U12 swamdoder het. Die weerstandbiedende individue kan uiteindelik die siektebevolking oorheers indien hierdie swamdoders herhaaldelik aangewend word. Hierdie weerstandbiedende siektes mag nie beheer word deur **Antagon** of enige ander groepkode U12 swamdoder nie.

Om swamdoderweerstand te vertraag:

- Vermy die eksklusiewe herhaaldelike gebruik van swamdoders in dieselfde swamdodergroepkode. Moet nie meer as 3 toedienings per groeiseisoen toedien nie. Wissel af met, of gebruik tenkmengsels van, geregistreerde produkte uit verskillende swamdodergroepkodes.
- 'n Spuitprogram van mengsels of afwisseling met middels met 'n ander metode van werking, kan die opbou van weerstandbiedende individue vertraag.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in siektebeheerprogramme.

Aangesien die voorkoms van weerstandbiedendheid moeilik is om te bepaal, is dit uiters belangrik om die behandelde gewasse noukeurig te ondersoek. Indien die behandeling nie effektief is met die gebruik van **Antagon** soos voorgeskryf nie, mag daar ‘n weerstandbiedende-populasie (swamras) teenwoordig wees. Indien so ‘n weerstandbiedende-populasie positief geïdentifiseer word, moet daar onmiddellik ‘n swamdoderbespuiting wat ‘n ander werkswyse het, waar daar geen bewys van weerstand teen die siekte voorkom, gedoen word. Vir spesifieke inligting oor weerstandsbestuur, kontak die registrasiehouer van hierdie produk.

GEBRUIKSBEPERKINGS

- Die opname en aktiwiteit van sistemiese middels kan verlaag word wanneer gewasse onder ernstige droogte- en/of voedings-strestoestande is. Daarom moet **Antagon nie** onder sulke omstandighede aangewend word nie.
- Spuitprogramme met **Antagon** moet in aanvang neem voordat die siekte/s gevestig is.
- Moet nie **Antagon** op enige gewas of situasie aanwend wat nie in hierdie voorskrifetiket genoem word nie.
- Gebruik **Antagon** slegs deur akkurate en betroubare spuittegnieke.
- Indien **Antagon** in ‘n tenkmengsel met ander aanbevole produkte gebruik word, moet oorweging aan die beperkings van hierdie betrokke produkte geskenk word.

GEBRUIKSAANWYSINGS
Gebruik slegs soos aangedui.

By stadig-drogende weerstoestande bestaan die moontlikheid dat die produk skilverruwing by vrugte, veral Golden Delicious, Granny Smith en Packham's Triumph, kan veroorsaak. Daarom is dit raadsaam om die produk slegs tydens die voorblom-stadium op hierdie kultivars te gebruik. Sodra die swamdoder droog is, is dit redelike reënvas. Met reënval van 80mm of meer, kan verwag word dat die effektiwiteit aansienlik kan afneem en mag 'n opvolg bespuiting nodig wees.

MENGINSTRUKSIES

Maak die spuittenk halfvol met geskikte water en voeg dan die verlangde hoeveelheid **Antagon** by die water in die spuittenk terwyl dit geroer word. Vul die spuittenk tot die verlangde hoeveelheid. Moet nie brakwater gebruik nie. Indien tenkmengsels met ander produkte gemaak word, moet die onderskeie vervaardigers se etiketaanbevelings gevolg word. Waar benatbare poeier formulerings in kombinasie met **Antagon** gebruik word, moet die poeier eers in 'n bietjie water gemeng word om 'n slyk te vorm; gooi dit dan in die spuittenk en laastens voeg die **Antagon** by. **Tenkmengsels moet onmiddellik uitgespuit word en nie toegelaat word om in die spuittenk te staan nie**. Spuittoerusting moet deeglik aan die einde van die toediening uitgespoel word.

VERENIGBAARHEID

Die verenigbaarheid van **Antagon** met ander produkte hang af van die formulerings van die onderskeie produkte asook die kwaliteit van die spuitwater wat gebruik word. Aangesien formulerings van tyd tot tyd verander, word dit aanbeveel dat 'n fisiese verenigbaarheidstoets gedoen word voordat die tenkmengsel gemaak word. **Antagon** is nie verenigbaar met kalk, chlorbensilaat, olies, asinfosmetiel en diasinon nie.

TOEDIENINGSMETODES
Verseker dat die toerusting korrek gekalibreer is en gereeld nagegaan word tydens toediening om egalige en akkurate toediening te verseker. Slegs skoon water moet gebruik word.

AANBEVELINGS

GEWAS EN SIEKTE	DOSIS	OPMERKINGS
Appels Skurfsiekte (*Venturia inaequalis*) **Pere** Skurfsiekte (*Venturia pirina*)	**Voor- & na-blom** 120 mℓ/100 ℓ water	Dien die eerste bespuiting toe by die groenpunt (20 punte/boom) - stadium en herhaal met tussenposes van 7 tot 10 dae. Brei intervalle uit na 14 dae, 2 weke na volblom. Stop die toediening voor die begin van Desember. Gaan voort met bespuiting in die geval van onvolkome beheer en langdurige nat weer. Moet nie meer as 3 toedienings per groeiseisoen toedien nie.
Kwepers Swartvlek	**Voor- en na-blom** 120 mℓ/100 ℓ water	Dien die eerste bespuiting toe by die groenpunt (20 punte/boom) - stadium en herhaal met tussenposes van 7 tot 10 dae. Brei intervalle uit na 14 dae, 2 weke na volblom. Stop die toediening voor die begin van Desember. Gaan voort met bespuiting in die geval van onvolkome beheer en langdurige nat weer. Moet nie meer as 3 toedienings per groeiseisoen toedien nie.

- Die **Antagon** breëspektrumswamdoder-kombinasies kan genesend gebruik word om 'n voorkomende kontakswamdoder-spuitprogram aan te vul. Kuratiewe bespuitings word slegs aanbeveel wanneer voldoende en betroubare siektevoorspelling-stelsels beskikbaar is. Behandelings moet binne 4 dae na die aanvang van 'n infeksieperiode gedoen word.