

TORPEDO SC


BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY

GEBRUIKSAANWYSINGS INGESLUIT
VERWYS NA BESONDERHEDE
SOOS OP HOUER / SAK GEDRUK

Lotnummer
Datum van vervaardiging

TORPEDO SC

HERBICIDE



Reg. No. L7655, Act/Wet No. 36 of/van 1947

2: 06/06/2016


A suspension concentrate herbicide for the pre-emergence control of most annual broadleaf weeds in the crops as indicated; also for the post-emergence control of broadleaf weeds in the crops as indicated.

'n Suspensiekonsentraat onkruidodder vir die voor-opkoms beheer van die meeste eenjarige breëblaaronkruid in die gewasse soos aangedui; asook vir die na-opkoms beheer van breëblaaronkruid in die gewasse soos aangedui.


HRAC HERBICIDE GROUP CODE	B	HRAC ONKRUIDDODER GROEPKODE
ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL		
Flumetsulam (triazolopyrimidine sulfonamide)	200 g/l	Flumetsulam (triasoloprimidien sulfonamied)

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


1ℓ



UN Number: 3082



CAUTION / VERSIGTIG



WARNINGS

Withholding periods: Minimum number of days between last application and harvest or feeding / grazing.

Legume crops..... 28 Days

- Handle with care.
- Harmful if swallowed.
- May cause skin and eye irritation, as well as skin sensitisation.
- Store under lock and key in a cool place.
- Store away from food, feed, fertilizer and other agricultural products.
- Keep out of reach of children, uninformed persons and animals.

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 weed 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.
- In case of accidental eye contact, flush with plenty of water and get medical attention if necessary.
- 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.
- 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.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Thereafter rinse the empty container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsate to the contents of the spray tank.
- Destroy the empty container and do not use for any other purpose.

USE RESTRICTIONS

- Do not use **TORPEDO SC** on inbred parent plants of crop cultivars as well as on experimental or newly released cultivars/varieties without first consulting your supplier or the seed company concerned.
- Do not apply this product in combination or tank mixture with any other product or agricultural remedy which is not specifically listed on this label. Meridian Agrochemical Company (Pty) Ltd accepts no responsibility for any negative effects experienced if the instructions on this label are not adhered to, unless a Meridian representative was consulted beforehand.
- If **TORPEDO SC** is used in a tank mix with other recommended products, consideration should be given to the restrictions of those respective products.
- Only apply **TORPEDO SC** using an accurate and safe application technique.
- Heavy rain on very sandy soils low in organic matter, can reduce weed control performance.
- Do not apply **TORPEDO SC** through any type of irrigation system.
- Do not use flood irrigation to apply or incorporate this product as this may result in crop injury and a reduction in weed control efficacy.
- Optimum weed control is obtained on a fine, even seedbed, free of clods, trash and weeds. **TORPEDO SC** will also give weed control in stubble, mulch or minimum tillage situations.
- In Maize, Green beans, Groundnuts, Dry beans and Soybeans: **TORPEDO SC** should be used in combination with one of the following products, depending on the crop – **Prefix S EC, Ultramoc S EC, Unimoc EC, Signet 915 EC** or **Acetak EC**.

TORPEDO SC alone or in tank mixtures may result in reduced weeds control efficacy and / or may damage the crops under the following conditions:

- Poorly drained soils or soils with a compaction layer, as under these conditions, waterlogging can occur and the herbicide may cause crop injury.
- Soils with a pH (water) value of 7.0 or more.
- Under conditions of heavy rain or irrigation on sandy or light gravel soils.
- Prolonged cold and wet conditions.
- Plants under stress due to factors such as nematode infestations, diseases, drought, poor crop nutrition etc.
- Soils with a pH (H₂O) of lower than 5.0 and / or organic material content higher than 3% may result in poor weed control efficacy.
- When **TORPEDO SC** is used on dry beans, ensure that the seed is treated with suitable fungicides such as **Eclipse ST** to control seedling diseases such as *Pythium spp.*, *Rhizoctonia spp.*, etc.
- **TORPEDO SC** must be used alone when applied post-emergence in clovers, lucerne and medics.
- Do not apply **TORPEDO SC**:
 - In a tank mixture with an organophosphate insecticide / nematicide.
 - where the crop seed is treated with an organophosphate insecticide / nematicide.
 - where an organophosphate insecticide has already been applied post-emergence to the crop
 - where such compounds have been placed in-furrow.
- Do not apply organophosphate products within 6 weeks of a **TORPEDO SC** application.
- Do not apply **TORPEDO SC** on fields where the crop rotation restrictions, on the labels of any preceding herbicides (e.g. triazines, sulfonylureas etc.) previously used on those same fields, have not been fully complied with.
- Due to the potential of mesotrione to persist in the soil longer than anticipated, it is advised to not make use of products of the imidazolinone class as well as the triazolopyrimidine class on fields where less than 400 mm rain has fallen, where soils cannot be adequately tilled in order to allow dilution of any remaining mesotrione residues as well as to accelerate microbial degradation and within 10 months of use of any dosage rate of any mesotrione containing formulation.
- Do not apply **TORPEDO SC** to seed maize, sweetcorn, popcorn and other exotic cultivars.
- **Dry beans:** Do not apply **TORPEDO SC** in a mixture with **UNIMOC EC** to any Small White bean cultivar, as crop injury may occur on such dry bean cultivars.

The following withholding periods must be observed with respect to follow-up crops:

Soya beans, dry beans, groundnuts and maize – nil

Potatoes, grain sorghum and wheat – 3 months

Sunflowers – 5 months

All other crops – 24 months

A test planting is required in all cases.

The above-mentioned waiting periods are valid only if:

- The correct dosage rate of **TORPEDO SC** alone, or in combination with complementary herbicide/s, according to the soil type was applied.
- Application was made on a soil pH (H₂O) of less than 7.0.
- Normal, or above average, rainfall occurred during, and following, the season in which the application was made.
- If **TORPEDO SC** and / or complementary herbicide/s were applied only once to the crop with a single application as directed on this label.

When **TORPEDO SC** is used in a tank mixture with another herbicide, the withholding periods of that product with respect to follow-up crops must be followed.

RESISTANCE WARNING

For resistance management, **TORPEDO SC** is a group code B herbicide. Any weed population may contain individuals naturally resistant to **TORPEDO SC** and other group code B herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **TORPEDO SC** or any other group code B 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 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 **TORPEDO SC** as recommended, a resistant weed population may be present. If a resistant weed population is positively identified, consideration should be given to prompt use of a herbicide with a different mode of action for which there is no record of resistance to the relevant weed. Meridian Agrochemical Company, trading as Meridian Agritech, will not accept any liability for performance failures in the event of a build-up of resistant weeds resulting from inadequate resistance management practices as indicated on the label.

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

DIRECTIONS FOR USE

Use only as directed.

MIXING INSTRUCTIONS

Half-fill the spray tank with clean water. Make a premix by carefully measuring out the required amount of **TORPEDO SC** and mixing it with at least 10 litres of water, then add the premix to the water in the tank while agitating. Fill the spray tank to the desired volume. Should tank mixtures with other herbicides be made, follow the respective manufacturers' label recommendations. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.** Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

COMPATIBILITY

The compatibility of **TORPEDO SC** 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.

TORPEDO SC is compatible with **Acetak EC** (L. 6904), **Prefix S EC** (L. 7362), **Unimoc EC** (L. 7341), **Ultramoc S EC** (L. 7342), **Ultramoc Xtra EC** (L8878) and most pyrethroid insecticides.

APPLICATION METHODS

An optimum crop seed planting depth of 50 – 75 mm for groundnuts and 20 – 60 mm for soybeans (depending on the seedbed and soil conditions) is recommended. For drybeans, an optimum seed planting depth of 30 – 50 mm (depending on the seedbed and soil conditions) below the soil surface is recommended.

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application. Knapsack sprayers or tractor mounted boom sprayers may be used. A spray volume of 200-300 l/ha should be used for ground application and can be applied via flat fan-type nozzles, preferably the low drift type to avoid fine droplets. **Constant agitation throughout the spray operation is essential.** Only clean water should be used.

Rain is essential to leach the product into the zone of the germinating weeds and, therefore, 10 –15 mm of rain or irrigation is needed within 7 days of application to ensure optimum results. Under drier conditions, weeds may emerge. These should be controlled with either a shallow cultivation, which will also incorporate the herbicide into the upper 10 – 20 mm of soil.

If soil crusting becomes a problem, rotary harrow in the same direction that the rows are planted, to assist crop germination. Harrowing after application may reduce weed control if untreated soil is thrown into deep planter furrows. Ensure that sufficient fertiliser is placed near the seed at planting to promote vigorous seedling growth.

Apply **TORPEDO SC** preferably with, or directly after, planting but not later than three days after planting.

Ground application:

TORPEDO SC may be applied with any properly calibrated medium or high volume sprayer, which is equipped with an efficient agitation mechanism, capable of adequate coverage and even distribution. Best results are obtained using flat fan-type spray nozzles and applying a minimum spray volume of 200 l/ha.

TORPEDO SC alone for use on clovers, lucerne or medics can be applied with any medium or high volume sprayer, properly calibrated equipped with an efficient agitation mechanism. The choice and arrangement of the fan type spray nozzles should be such as to ensure even distribution and optimal recovery of the herbicide. The recommended amount of **TORPEDO SC** should be applied in at least 200 ℓ water / ha, as an overall application. If band treatment is practiced, proportionately less spray mixture should be used per hectare.

RECOMMENDATIONS

PRE-EMERGENCE

TABLE 1. TORPEDO SC plus Ultramoc S EC OR Prefix S EC for broad spectrum weed control in maize

CROP	% CLAY	TORPEDO SC (mℓ/ha)	Ultramoc S EC (ℓ/ha)	Prefix S EC (ℓ/ha)	TIMING OF APPLICATION
Maize	0 – 10	70	0.75	0.75 – 1.25	Apply to a well prepared seedbed after planting but before crop and weed emergence. Use the higher rate for extended and improved control of broadleaf weeds, crab finger grass and yellow nutsedge. Use the higher rate on soils with > 1.0 % organic matter content.
	11 – 20	100	1.0	1.25 – 1.75	
	21 – 30	125	1.4	1.75 – 2.0	
	31 – 40	150	1.6	2.0 – 2.25	
	> 41	170	1.8	2.25	

- Use the correct rates for different row and band widths.

Table 2: SIGNET 915 EC in tank mixture with Torpedo SC for broad spectrum pre-emergence weed control in maize

CROP	% CLAY	SIGNET 915 EC (mℓ/ha)	Torpedo SC (mℓ/ha)	TIMING OF APPLICATION
Maize	0-10%	400-650	70	Apply to a well prepared seedbed after planting but before crop and weed emergence. Use the higher rate for extended and improved control of broadleaf weeds, crab finger grass and yellow nutsedge. Use the higher rate on soils with > 1.0 % organic matter content.
	11-20%	400-650	100	
	21-30%	500-700	125	
	31-40%	600-700	150	
	41-50%	600-800	170	

TABLE 3. TORPEDO SC plus Prefix S EC OR Acetak EC for broad spectrum weed control in groundnuts

CROP	% CLAY	TORPEDO SC (mℓ/ha)	Prefix S EC (ℓ/ha)	Acetak EC (ℓ/ha)	TIMING OF APPLICATION
Groundnuts	0 – 10	70	0.8	0.75	Apply to a well prepared seedbed after planting but before crop and weed emergence. Use the higher rate for extended and improved control of broadleaf weeds, crab finger grass and yellow nutsedge. Use the higher rate on soils with > 1.0 % organic matter content.
	11 – 20	100	1.1	1.0	
	21 – 30	125	1.1 – 1.6	1.0 – 1.5	

- Use the correct rates for different row and band widths.

TABLE 4. TORPEDO SC plus Unimoc EC for broad spectrum weed control in dry beans, soya beans and groundnuts

CROP	% CLAY	TORPEDO SC (mℓ/ha)	Unimoc EC (ℓ/ha)	TIMING OF APPLICATION
Dry beans, soy beans and groundnuts	0 – 10	70	0.65	Apply to a well prepared seedbed after planting but before crop and weed emergence.
	11 – 20	100	0.9	
	21 – 30	125	1.2	
	31 – 40	150	1.4	
	> 41	170	1.6	

- Use the correct rates for different row and band widths.

TABLE 5. TORPEDO SC plus Unimoc EC OR Ultramoc Xtra EC for broad spectrum weed control in green beans

CROP	% CLAY	TORPEDO SC (mℓ/ha)	Unimoc EC (ℓ/ha)	Ultramoc Xtra EC (ℓ/ha)	TIMING OF APPLICATION
Green Beans	0 – 10	100	0.9	-	Apply to a well prepared seedbed after planting but before crop and weed emergence. Use the higher rate for extended and improved control of broadleaf weeds, crab finger grass and yellow nutsedge. Use the higher rate on soils with > 1.0 % organic matter content.
	11 – 20	100	-	0.75 – 1.1	
	21 – 30	125	1.1 – 1.6	1.1 – 1.5	
	> 30	-	-	1.5 – 2.0	

POST-EMERGENCE

CROP	DOSAGE RATE (/ha)	REMARKS
CLOVERS, MEDICS, LUCERNE	200 mℓ TORPEDO SC + suitably registered adjuvant as directed on the label thereof.	Weeds must be actively growing at the time of the application. TORPEDO SC is taken up by weed plant foliage and translocated to the growing points. The growth of susceptible weeds is arrested, thereby limiting competition to the crop. Yellowing and death of weeds may follow. Apply once the legume pasture has reached the fully developed third trifoliate leaf stage and prior to flowering. Do not apply TORPEDO SC too late when the foliage of the crop and / or the weeds is so large and / or dense that thorough coverage and wetting of all the weeds does not occur, as this will result in only partial weed control. Do not apply a tank-mixture of TORPEDO SC with any Group A herbicide as such a mixture is antagonistic and poor control of annual grasses is likely to occur.

WEEDS CONTROLLED BY TORPEDO SC plus Acetak EC, Ultramoc S EC, Unimoc EC or Prefix S EC:

Pre-emergence only

<i>Amaranthus hybridus</i>	Common pigweed
<i>Bidens pilosa</i>	Common blackjack / Spanish needle
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Chenopodium album</i>	White Goosefoot, Lamb's quarters
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Chloris virgata</i>	Feathertop Chloris
<i>Cleome monophylla</i>	Spindlepod
<i>Dactyloctenium aegyptium</i>	Crowfoot
<i>Digitaria sanguinalis</i>	Crab finger-grass
<i>Echinochloa crusgalli</i>	Barnyard grass
<i>Eleusine indica</i>	Goose grass
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Panicum maximum</i>	Common buffalo grass
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Portulaca oleracea</i>	Purslane
<i>Pseudobrachiaria deflexa</i>	False signal grass
<i>Schkuhria pinnata</i>	Dwarf marigold

<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Setaria verticillata</i>	Sticky bristle grass
<i>Tagetes minuta</i>	Khaki weed
<i>Tragus berteronianus</i>	Small carrotseed grass
<i>Tragus racemosus</i>	Large carrotseed grass
<i>Tribulus terrestris</i>	Dubbeltjie
<i>Urochloa mozambicensis</i>	Bushveld herringbone grass
<i>Urochloa panicoides</i>	Herringbone grass

Variable control (pre-emergence)

<i>Cyperus esculentus</i>	Yellow nutsedge
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WEEDS CONTROLLED BY TORPEDO SC plus SIGNET 915 EC

<i>Digitaria sanguinalis</i>	Crab Finger Grass
<i>Amaranthus hybridus</i>	Common Pigweed
<i>Eleusine indica</i>	Goose grass
<i>Chenopium album</i>	Goose foot
<i>Acanthospermum hispidum</i>	Bristly Starbur
<i>Echinochloa crusgalli</i>	Barnyard Grass
<i>Nicandra physilloides</i>	Apple of Peru

Suppression (pre-emergence)

<i>Cyperus esculentus</i>	Yellow nutsedge
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NOTES:

The variable control of weeds mentioned directly above is dependent upon environmental conditions.

The pre-emergence control of *Cyperus esculentus* is dependent on the following:

- Where a dosage choice is given, use the higher rate.
- Planting into a firm and fine seedbed must be preceded by a deep ploughing.
- **Acetak EC, Prefix S EC, Signet 915 S EC or Unimoc EC or Ultramoc S EC** plus must be applied within 2 days after planting.
- Sufficient continual soaking rain or irrigation (at least 15 mm on light soils and 25 mm on heavy soils) must fall within 7 days of spraying to leach the herbicide into the germination zone.

Weeds which are resistant to ALS inhibitor herbicides may not be controlled.

To increase the spectrum of broadleaf weeds controlled, it is recommended that either tank mixes or follow-up application of standard registered broadleaf herbicides are used in accordance with the manufacturer's label recommendations.

WEEDS CONTROLLED BY TORPEDO SC alone:

Post-emergence only on Clovers, Lucerne and Medics

<i>Ceniza turbinata</i>	Goose daisy
<i>Emex australis</i> **	Spiny Emex
<i>Erodium moschatum</i> *	Musk herons' bill
<i>Raphanus raphanistrum</i> **	Wild radish
<i>Malva parviflora</i>	Small mallow

*Variable control may be expected.

♣ The growth stage of *Emex australis* should be at the 2 true leaf stage (1st true leaves after cotyledon leaves). Weeds larger than specified (or weeds affected by stress or grazing prior to treatment) should die back, but re-growth (with resultant flowering and seeding) may occur from the root crown.

**Maximum growth stage at application should not be > 5 – 10 cm diameter.

NOTE

Weeds which are resistant to ALS inhibitor herbicides may not be controlled.

TORPEDO SC alone or in mixtures controls the weeds as listed above. Other weeds that were not present during the development trials with the products may also be controlled to a certain degree. The registration holder does not accept any liability in respect of the control of unlisted weeds.

ACKNOWLEDGEMENT OF TRADEMARKS

Acetak EC (L.6904)
Prefix S EC (L. 7362)
Ultramoc S EC (L. 7342)
Unimoc EC (L. 7341)
Ultramoc Xtra EC (L.8878)
Signet 915 S EC (L.9071)

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WAARSKUWINGS

Onthoudingsperiodes: Minimum aantal dae tussen laaste toediening en oes of voer/beweiding.

Peulgewasse 28 Dae

- Hanteer versigtig.
- Skadelik indien ingesluk.
- Mag oog- en velirritasie sowel as velsensitiwiteit veroorsaak.
- Bêre agter slot-en-grendel in 'n koel plek.
- Bêre weg van voedsel, voer, kunsmis en ander landbouprodukte.
- Hou buite bereik van kinders, oningeligte persone en diere.

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 doeltreffendheid daarvan kan beïnvloed word deur faktore soos abnormale grond-, klimaats- en bergingstoestande, kwaliteit van die verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui word nie en die voorkoms van weerstand van die onkruid teen die betrokke middel sowel as die tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordlikheid vir skade aan gewasse, plantegroei en die omgewing of nadelige invloede op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van 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.

VOORSORGMATREËLS

- Moet nie spuitnewel inasem nie.
- Vermoed kontak met die vel en oë deur beskermende oorklere te dra wanneer die produk gemeng word.
- Indien produk in aanraking met die oë kom, spoel met water en kry mediese aandag indien nodig.
- Was met seep en water na gebruik en toevallige velkontak; so ook die besoedelde klere.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat hande en gesig gewas is nie.
- Vermoed wegdrywing van spuitnewel op ander gewasse, weiveld, riviere, damme en plekke wat nie behandel moet word nie.
- Maak toedieningsapparaat skoon na gebruik. Uitspoelwater moet nie gewasse, weiveld, riviere, damme en boorgate besoedel nie.
- Voorkom die besoedeling van voedsel, voer, drinkwater en eetgerei.
- Keer die leë houër om oor die spuit- of mengtenk en dreineer vir minstens 30 sekondes nadat die vloeï tot 'n gedrup verminder het. Spoel die leë houër daarna **drie keer** uit met 'n volume skoon water gelykstande aan 'n minimum van 10% van die houër. Gooi die spoelwater by die inhoud van die spuittenk voordat die houër vernietig word.
- Vernietig die leë houër, moet vir geen ander doel gebruik nie.

GEBRUIKSBEPERKINGS

- Moet nie **TORPEDO SC** op ingeteelde ouerplante van gewaskultivars asook eksperimentele of nuut vrygestelde kultivars gebruik alvorens die vervaardigers of saadverspreiders geraadpleeg is nie.
- Moet nie hierdie produk in kombinasie of tenkmengsel met enige ander produk of landboumiddel gebruik wat nie spesifiek op hierdie etiket gelys is nie. Meridian Agrochemical Company (Edms.) Bpk. aanvaar geen verantwoordelikheid vir enige negatiewe gevolge indien die instruksies op die etiket nie nagekom word nie, tensy 'n Meridian verteenwoordiger vooraf geraadpleeg is.
- Indien **TORPEDO SC** in 'n tenkmengsel met ander aanbevole produkte toegedien word, moet oorweging geskenk word aan die beperkings van daardie betrokke produkte.
- Moet nie **TORPEDO SC** op swak gedreineerde grond of grond met 'n kompakslaag toedien nie. Die onkruiddoder mag tydens versuip-toestande skade aan gewasse veroorsaak.
- Moet nie **TORPEDO SC** op enige gewas of situasie toedien wat nie op hierdie etiket verskyn nie.
- Dien **TORPEDO SC** slegs met akkurate en veilige toedieningsmetodes toe.
- Swaar reën op sandgronde met 'n lae organiese materiaalinhoud sowel as vloedbesproeiing mag tot verminderde onkruidbeheer lei.
- Moet nie **TORPEDO SC** deur enige tipe besproeiingstelsel toedien nie.

- Moet nie van vloedbesproeiing gebruik maak om hierdie produk toe te dien of te inkorporeer nie, want dit kan lei tot skade aan die gewas en 'n afname in die effektiwiteit van onkruidbeheer tot gevolg hê.
- Optimale onkruidbeheer word verkry op 'n fyn, gelyk saadbed wat vry van kluite, onkruid en plantreste is. **TORPEDO SC** sal ook onkruidbeheer waar minimum- of deklaagbewerking toegepas word.
- By mielies, groenbone, grondbone, droëbone en sojabone: **TORPEDO SC** moet in kombinasie met een van die volgende produkte gebruik word; afhangende van die gewas – **Prefix S EC, Ultramoc S EC, Unimoc EC, SIGNET 915 EC** of **Acetak EC**.

TORPEDO SC alleenlik of in tenkmengsels kan tot verminderde doeltreffende onkruidbeheer lei en/of skade aan gewasse aanrig onder die volgende omstandighede:

- Swak gedreineerde gronde met 'n kompaksielaag; want onder sulke omstandighede kan versuipptoestande voorkom wat gewasskade deur die onkruiddoder kan veroorsaak.
- Grond met 'n pH (water) waarde van 7.0 of meer.
- Onder omstandighede van swaar reën of besproeiing op sanderige of ligte klipgrond.
- Verlengde nat en koue toestande.
- Gronde met 'n pH (water) van minder as 5.0 en/of organiese materiaalinhoud hoër as 3% kan lei tot swak onkruidbeheer.
- Indien **TORPEDO SC** met ander middels in tenkmengsels gebruik word, moet die gebruiksaanwysings van die betrokke produkte gevolg word.
- Wanneer **TORPEDO SC** op droëbone gebruik word, verseker dat die saad met 'n geskikte swamdoder soos **Eclipse ST** behandel om saailingsiektes soos *Pythium spp.*, *Rhizoctonia spp.*, ens te beheer.
- **TORPEDO SC** moet op sy eie gebruik word wanneer dit as na-opkoms in klawers, lusern en medics toegedien word.
- Moet nie **TORPEDO SC** toedien
 - in 'n tenkmengsel met 'n organofosfaat insekdoder/aalwurmdoder nie.
 - waar die gewassaad met 'n organofosfaat insekdoder/aalwurmdoder behandel word.
 - waar 'n organofosfaatinsekdoder alreeds na-opkoms toegedien is nie.
 - waar sulke middels in 'n voor toegedien is nie.
- Moenie organofosfaatprodukte binne 6 weke van 'n **TORPEDO SC** toediening toedien nie.
- Moet nie **TORPEDO SC** op gronde toedien waar die wisselboubeperrings, op die etikette van enige voorafgaande onkruiddoders (bv. triasiene, sulfonielureum ens.) wat voorheen gebruik is op daardie selfde lande, nie ten volle nagekom was nie.
- As gevolg van die potensiaal van mesotrioon om langer in gronde te bly as wat verwag word, is dit raadsaam om nie gebruik te maak van produkte van die imidasoloonklas sowel as die triasolopirimidieneklas op landerye waar minder as 400 mm reën geval het nie; waar grond nie voldoende bewerk kan word om die afbraak van enige oorblywende mesotrioonresidue toe te laat, sowel as mikrobiële afbraak te versnel en binne 10 maande van die gebruik van enige dosis van enige mesotrioonbevattende formulering.
- Moet nie **TORPEDO SC** op saadmielies, suikermielies, springmielies en ander eksotiese kultivars toedien nie.
- **Droëbone:** Moet nie **TORPEDO SC** in 'n mengsel met **UNIMOC EC** op enige Klein Wit boonkultivar toedien nie, want gewasskade mag op sulke droëboonkultivars voorkom.

Die volgende onthoudingsperiodes ten opsigte van opvolggewasse moet nagekom word :

- Sojabone, droëbone, grondbone en mielies – geen.
- Aartappels. Graansorghum en koring – 3 maande.
- Sonneblomme – 5 maande.
- Alle ander gewasse - 24 maande

Bogenoemde wagperiodes geld slegs indien:

- Die korrekte dosis **TORPEDO SC** alleenlik of in kombinasie met komplementêre onkruiddoder(s), volgens die grondtipe toegedien is.
- Toediening gedoen is op 'n grond-pH (water) van minder as 7.0.
- Normale, of bogemiddelde reënval voorkom het gedurende, en na die seisoen waarin die toediening gemaak is.
- Indien **TORPEDO SC** en/of komplementêre onkruiddoder(s) net een keer met 'n enkele toediening op die gewas toegedien is soos op die etiket aangedui.

Vir alle ander gewasse is die onthoudingsperiode 24 maande. 'n Toetsplanting word in alle gevalle aanbeveel. Wanneer **TORPEDO SC** in 'n tenkmengsel met 'n ander onkruiddoder gebruik word, moet die onthoudingsperiodes van daardie produk ten opsigte van opvolggewasse gevolg word.

WEERSTANDSWAARSKUWING

Vir weerstandsbestuur is **TORPEDO SC** 'n groepkode B onkruidoder. Enige populasie van 'n spesifieke onkruid mag individue insluit wat 'n natuurlike weerstand teen **TORPEDO SC**, of enige ander groepkode B onkruidoder het. Indien hierdie onkruidoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die onkruidpopulasie oorheers. Hierdie weerstandbiedende onkruid sal waarskynlik nie deur **TORPEDO SC** of enige ander groepkode B onkruidoder beheer word nie.

Om weerstand teen onkruidoders te vertraag:

- Vermyn die eksklusiewe herhaaldelike gebruik van onkruidoders met dieselfde groepkode.
- Wissel af met, of gebruik tenkmengsels van, produkte in verskillende onkruidodergroepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in onkruidbestuurprogramme.

Aangesien die voorkoms van weerstand nie kan voorspel word nie, word gebruikers aangeraai om behandelde gewasse noukeurig dop te hou. As behandeling nie suksesvol is na die gebruik van **TORPEDO SC** soos aanbeveel nie, mag 'n weerstandbiedende onkruidpopulasie teenwoordig wees. As 'n weerstandige onkruidpopulasie positief geïdentifiseer word, moet oorweging geskenk word aan die gebruik van 'n onkruidoder met 'n ander metode van werking waarvoor daar geen rekord van weerstand teen die betrokke onkruid is nie. Meridian landbouchemiese maatskappy, handel as Meridian Agritech, sal geen aanspreeklikheid vir enige gebrek aan prestasie in die geval van 'n opbou van weerstandbiedende onkruid aanvaar as gevolg van onvoldoende weerstand bestuurspraktyke aanvaar soos aangedui op die etiket Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk. Meridian Agrochemical Company (Edms.) Bpk. sal nie aanspreeklikheid aanvaar vir enige gebrek aan prestasie in die geval van die opbou van weerstandbiedende onkruid as gevolg van onvoldoende weerstandsbestuurspraktyke soos aangedui op die etiket nie..

Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui.

MENGINSTRUKSIES

Maak die spuitnek halfvol met skoon water en voeg die benodigde hoeveelheid **TORPEDO SC** by terwyl water aanhoudend geroer word. Maak die spuitnek tot die finale volume vol. Roer goed, om vermenging te verseker, voordat die mengsel toegedien word. Indien tenkmengsels gemaak word met ander middels, moet die betrokke vervaardiger se etiket gevolg word. **Die tenkmengsel moet onmiddellik uitgespuit word en nie toegelaat word om oornag in die spuitnek te staan nie.** Die spuittoerusting moet aan die einde van toediening deeglik uitgewas word.

VERENIGBAARHEID

Die verenigbaarheid van **TORPEDO SC** met ander produkte hang van die formulering van die betrokke produkte af, asook van die kwaliteit van die spuitwater. Deurdat formulering van tyd tot tyd verander, word dit aanbeveel om 'n fisiese verenigbaarheidstoets te doen voordat die tenkmengsel gemaak word. **TORPEDO SC** is verenigbaar met **Acetak EC** (L. 6904), **Prefix S EC** (L. 7362), **Ultramoc S EC** (L. 7342), **Unimoc EC** (L. 7341), **Ultramoc Xtra EC** (L. 8878) en die meeste piretroïedinsekdoders.

TOEDIENINGSMETODES

'n Optimale plantdiepte van 50 - 75 mm vir grondbone en 20-60 mm vir sojabone (afhangende van die saadbed en grondtoestande) word aanbeveel. Vir droëbone, word 'n optimale plantdiepte van 30 - 50 mm (afhangend van die saadbed en grondtoestande) van die saad onder die grondoppervlak aanbeveel.

Maak seker dat die spuittoerusting korrek gekalibreer is en dit moet gereeld gedurende toediening nagegaan word om seker te maak dat die toediening egalig en akkuraat is. Rugsakspuite of konvensionele spuitbalke kan gebruik word. 'n Totale spuitvolume van 200 – 300 l/ha moet gebruik word en kan met platwaaierspuitpunte toegedien word, verkieslik die lae-dryf tipe om fyn druppels te voorkom. **Die mengsel moet aanhoudend en deeglik geroer word tydens toediening.** Gebruik net skoon water vir toediening.

Reënval kort na toediening is noodsaaklik om die onkruidodder in die bogrondlae in te loog waar die ontkiemende onkruid voorkom en daarvoor is 10 – 15 mm reën binne 7 dae na toediening nodig om optimale resultate te verseker. Onder droë toestande mag onkruidsaailinge opkom. Dié onkruid kan met 'n vlak bewerking vernietig word wat terselfdertyd die onkruidodder met die boonste 10 – 20 mm grondlaag vermeng. Indien korsvorming 'n probleem word, moet 'n roltandeg in dieselfde rigting as die plantrye gebruik word om die ontkieming van die mielies te bevorder. Skoffelbewerking na toediening mag onkruidbeheer benadeel indien onbehandelde grond in diep plantrye gegooi word. Verseker dat voldoende kunsmis met plant naby die saad geplaas word om kragtige saailinggroei te bevorder. **TORPEDO SC** moet verkieslik met, of net na plant toegedien word, maar nie later as drie dae na plant nie.

Grondtoediening:

TORPEDO SC mag toegedien word met enige behoorlike gekalibreerde medium- tot hoëvolume spuit wat toegerus is met 'n goeie roermeganisme wat egalige bedekking sal verseker. 'n Totale spuitvolume van 200 – 300 l/ha moet gebruik word en kan met platwaaierspuitpunte toegedien word, verkieslik die lae-dryf tipe om fyn druppels te voorkom.

TORPEDO SC alleenlik vir gebruik op klawers, lusern of medics kan toegedien word met enige medium- of hoëvolume spuittoerusting wat korrek gekalibreer is en toegerus is met 'n doeltreffende roermeganisme. Die keuse en plasing van die waaier-tipe-spuitpunte moet sodanig wees dat 'n egalige verspreiding en optimale herwinning van die onkruidodder verkry word. Die aanbevole hoeveelheid **TORPEDO SC** moet in ten minste 200 l water/ha, as 'n algehele bespuiting toegedien word. As bandplasing gedoen word, moet proporsioneel minder spuitmengsel per hektaar gebruik word.

AANBEVELINGS

VOOROPKOMS

TABEL 1. TORPEDO SC plus Ultramoc S EC OF Prefix S EC vir breëspektrum-onkruidbeheer in mielies.

GEWAS	% KLEI	TORPEDO SC (mℓ/ha)	Ultramoc S EC (ℓ/ha)	Prefix S EC (ℓ/ha)	TYD VAN TOEDIENING
Mielies	0 – 10	70	0.75	0.75 – 1.25	Dien op 'n goed voorbereide saadbed na plant toe, maar voor-opkoms van gewas en onkruid. Gebruik die hoër dosis vir verlengde en verbeterde beheer van breëblaaronkruid, kruisvingergras en geeluintjie. Gebruik die hoër dosis op gronde met meer as 1.0 % organiese materiaalinhoud.
	11 – 20	100	1.0	1.25 – 1.75	
	21 – 30	125	1.4	1.75 – 2.0	
	31 – 40	150	1.6	2.0 – 2.25	
	> 41	170	1.8	2.25	

- Gebruik die korrekte dosis vir verskillende ry- en baanwydtes.

Tabel 2: SIGNET 915 EC in tenkmengsel met TORPEDO SC vir breëspektrum vooropkoms-onkruidbeheer in mielies.

GEWAS	KLEI %	SIGNET 915 EC (mℓ/ha)	Torpedo SC (mℓ/ha)	TYD VAN TOEDIENING
Mielies	0-10%	400-650	70	Dien op 'n goed voorbereide saadbed na plant toe, maar voor gewas en onkruid opgekom het. Gebruik die hoër dosis vir verlengde en verbeterde beheer van breëblaaronkruid, kruisvingergras en geeluintjie. Gebruik die hoër dosis op gronde met >1.0% organiese materiaalinhoud.
	11-20%	400-650	100	
	21-30%	500-700	125	
	31-40%	600-700	150	
	41-50%	600-800	170	

TABEL 3. TORPEDO SC plus Prefix S EC of Acetak EC vir breëspektrum-onkruidbeheer in grondbone.

GEWAS	% KLEI	TORPEDO SC (mℓ/ha)	Prefix S EC (ℓ/ha)	Acetak EC (ℓ/ha)	TYD VAN TOEDIENING
Grondbone	0 – 10	70	0.8	0.75	Dien op 'n goed voorbereide saadbed na plant toe, maar voor-opkoms van gewas en onkruid. Gebruik die hoër dosis vir velengde en verbeterde beheer van breëblaaronkruid, kruisvingergras en geeluintjie. Gebruik die hoër dosis op gronde met meer as 1.0 % organiese materiaalinhoud.
	11 – 20	100	1.1	1.0	
	21 – 30	125	1.1 – 1.6	1.0 – 1.5	

- Gebruik die korrekte dosis vir verskillende ry- en baanwydtes.

TABEL 4. TORPEDO SC plus Unimoc EC vir breëspektrum-onkruidbeheer in droëbone, sojabone en grondbone

GEWAS	% KLEI	TORPEDO SC (mℓ/ha)	Unimoc EC (ℓ/ha)	TYD VAN TOEDIENING
Droëbone, sojabone en grondbone	0 – 10	70	0.65	Dien op 'n goed voorbereide saadbed na plant toe, maar vooropkoms van gewas en onkruid.
	11 – 20	100	0.9	
	21 – 30	125	1.2	
	31 – 40	150	1.4	
	> 41	170	1.6	

- Gebruik die korrekte dosis vir verskillende ry- en baanwydtes.

TABEL 5. TORPEDO SC plus Unimoc EC of Ultramoc Xtra EC breëspektrum-onkruidbeheer in groenbone.

GEWAS	% KLEI	TORPEDO SC (mℓ/ha)	Unimoc EC (mℓ/ha)	Ultramoc Xtra EC (mℓ/ha)	TYD VAN TOEDIENING
Groenbone	0 – 10	100	900	-	Dien op 'n goed voorbereide saadbed na plant toe, maar vooropkoms van gewas en onkruid. Gebruik die hoër dosis vir velengde en verbeterde beheer van breëblaaronkruid, kruisvingergras en geeluintjie. Gebruik die hoër dosis op gronde met meer as 1.0 % organiese materiaalinhoud.
	11 – 20	100	-	0.75 – 1.1	
	21 – 30	125	1.1 – 1.6	1.1 – 1.5	
	> 30	-	-	1.5 – 2.0	

NA-OPKOMS

GEWAS	DOSIS (/ha)	OPMERKINGS
KLAWERS, MEDICS, LUSERN	200 ml TORPEDO SC + toepaslik geregistreerde bevorderingsmiddel soos op die etiket daarvan aangedui.	<p>Onkruid moet aktief groei ten tyde van die toediening. TORPEDO SC word deur die onkruidplant se blare opgeneem en na die groeipunte getranslokeer. Die groei van gevoelige onkruid word gestop en sodoende word kompetisie met die gewas verminder. Vergeling en sterfte van onkruid sal waarskynlik volg.</p> <p>Dien toe sodra die peulplantweiding die volledig ontwikkelde derde drieledige blaarstadium bereik het en voor blom. Moenie TORPEDO SC te laat toedien wanneer die blare van die gewas en/of onkruid groot is en/of te dig is dat deeglike bedekking en benutting van al die onkruid kan plaasvind nie, aangesien dit sal lei tot slegs gedeeltelike onkruidbeheer. Moet nie 'n TORPEDO SC tenkmengsel saam met enige Groep A onkruidodders toedien nie, aangesien so 'n mengsel antagonisties is en swak beheer van eenjarige grasse geneig is om te gebeur.</p>

ONKRUIDE WAT DEUR TORPEDO SC plus Acetak S EC, Ultramoc S EC, Unimoc EC of Prefix S EC BEHEER SAL WORD:

Net voor-opkoms

<i>Amaranthus hybridus</i>	Gewone misbredie
<i>Bidens pilosa</i>	Gewone Knapsekêrel
<i>Brachiaria eruciformis</i>	Litjiesinjalgras
<i>Chenopodium album</i>	Withondebossie
<i>Chenopodium carinatum</i>	Groenhondebossie
<i>Chloris virgata</i>	Witpluim-Chloris
<i>Cleome monophylla</i>	Rusperbossie
<i>Dactyloctenium aegyptium</i>	Hoenderspoor
<i>Digitaria sanguinalis</i>	Kruisvingergras
<i>Echinochloa crusgalli</i>	Hannepootmanna
<i>Eleusine indica</i>	Jongosgras
<i>Galinsoga parviflora</i>	Knopkruid
<i>Panicum maximum</i>	Gewone buffelsgras
<i>Panicum schinzii</i>	Soetbuffelsgras
<i>Portulaca oleracea</i>	Porslein
<i>Pseudobrachiaria deflexa</i>	Bastersinjalgras
<i>Schkuria pinnata</i>	Klein kakiebos
<i>Setaria pallide-fusca</i>	Rooiborselgras
<i>Setaria verticillata</i>	Klitsborselgras
<i>Tagetes minuta</i>	Kakiebos
<i>Tragus berteronianus</i>	Kleinwortelsaadgras
<i>Tragus racemosus</i>	Grootwortelsaadgras
<i>Tribulus terrestris</i>	Dubbeltjie
<i>Urochloa mozabicensis</i>	Bosveldbeesgras
<i>Urochloa panicoides</i>	Beesgras

Wisselvallige beheer (voor-opkoms)

<i>Cyperus esculentus</i>	Geeluintjie
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ONKRUIDE WAT DEUR TORPEDO SC plus SIGNET 915 EC BEHEER SAL WORD.

<i>Digitaria sanguinalis</i>	Kruisvingergras
<i>Amaranthus hybridus</i>	Gewone misbredie
<i>Eleusine indica</i>	Jongosgras
<i>Chenopium album</i>	Hondebossie
<i>Acanthospermum hispidum</i>	Regopsterklits
<i>Echinochloa crusgalli</i>	Hanepootmanna
<i>Nicandra physaloides</i>	Basterappelliefie

Onderdrukking (vooropkoms)

<i>Cyperus esculentus</i>	Geeluintjies
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NOTAS:

Die wisselvallige beheer van onkruid soos bogenoem hang van omgewingstoestande af. Die vooropkomsbeheer van *Cyperus esculentus* hang van die volgende af:

- Waar 'n dosiskeuse gegee word, moet die hoër dosis gebruik word.
- Voor aanplanting plaasvind, moet die grond diep bewerk word en 'n fyn, gelyk saadbed moet geskep word.
- **Acetak EC, Prefix S EC, SIGNET 915 S EC, Unimoc EC of Ultramoc S EC** moet binne 2 dae van die plantproses toegedien word.
- Genoeg aanhoudende reën of besproeiing (ten minste 15 mm op ligte gronde en 25 mm op swaar gronde) moet binne 7 dae van bespuiting val, sodat die onkruidodder tot in die ontkiemingsgebied gelooë kan word.

Onkruid wat bestand is teen ALS-inhiberende onkruidodders sal nie beheer word nie.

Om die spektrum van breëblaaronkruidbeheer te verbeter, word aanbeveel om van óf tenkingsels gebruik te maak of van opvolgbespuitings van standaard geregistreerde breëblaaronkruidodders. Dié mengsels moet gebruik word deur die betrokke produk se etiket noukeurig te volg.

ONKRUIDE WAT DEUR TORPEDO SC ALLEENLIK BEHEER WORD

Na-opkoms alleenlik op Klawers, Lusern en Medics

<i>Ceniza turbinata</i>	Ganskos
<i>Emex australis</i> **	Kaapse Dubbeltjie
<i>Erodium moschatum</i> *	Turknael
<i>Raphanus raphanistrum</i> **	Ramenas
<i>Malva parviflora</i>	Kiesieblaar

*Wisselvallige beheer kan verwag word.

♣ Die groeistadium van *Emex australis* moet by die 2 ware blaarstadium (1 ware blare na saadlob blare) wees. Onkruid groter as gespesifiseer (of onkruid wat beïnvloed is deur stres of weiding voor behandeling) sal terugsterf, maar hergroei (met gevolglike blom en saadvorming) mag voorkom vanaf die wortelkroon.

** Maksimum groeistadium met toediening moet nie > 5 – 10cm in deursnee wees nie.

NOTA

Onkruid wat bestand is teen ALS-inhiberende onkruidodders sal nie beheer word nie.

TORPEDO SC alleenlik of in mengsels beheer die onkruid soos hierbo gelys. Ander onkruid wat nie tydens die ontwikkelingsproewe van die produkte teenwoordig was nie, kan ook tot 'n sekere mate beheer word. Die registrasiehouer neem geen verantwoordelikheid vir die beheer van onkruid wat nie gelys is nie.

ERKENNING VAN HANDELSMERKE

Acetak EC (L.6904)	Meridian Agrochemical Company (Edms.) Bpk.
Prefix S EC (L. 7362)	Meridian Agrochemical Company (Edms.) Bpk.
Ultramoc S EC (L. 7342)	Meridian Agrochemical Company (Edms.) Bpk.
Unimoc EC (L. 7341)	Meridian Agrochemical Company (Edms.) Bpk.
Ultramoc Xtra EC (L.8878)	Meridian Agrochemical Company (Edms.) Bpk.
Signet 915 S EC (L.9071)	Meridian Agrochemical Company (Edms.) Bpk.