DIRECTIONS FOR USE ENCLOSED

# **TORPEDO SC**

**HERBICIDE** 



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

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.

3:09/03/2021-Jan2022

'n Suspensiekonsentraat onkruiddoder vir die vooropkoms beheer van die meeste eeniarige breëblaaronkruide in die gewasse soos aangedui; asook vir die na-opkoms beheer van breëblaaronkruide in die gewasse soos aangedui.

HRAC HERBICIDE GROUP CODE

2

HRAC ONKRUIDDODERGROEPKODE

#### **ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL**

**Flumetsulam** (triazolopyrimidine-type1) 200 g/l

**Flumetsulam** (triasolopirimidien-tipe 1)

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

24 HR EMERGENCY NUMBERS Griffon Poison Information Centre: +27 82 446 8946 24 Hr Transport / Spill emergency no Envirosure +27 31 205 4918 (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

UN Number: 3082







#### TORPEDO SC

Reg. No. L 7655 Act/Wet No. 36 of/van 1947 HRAC HERBICIDE GROUP CODE / HRAC ONKRUIDDODER GROEPKODE: 2

#### **ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:**

Registration holder / Registrasiehouer:

Meridian Agrochemical Company (Pty.) Ltd.

Reg. No. 2000/010819/07

P.O. Box 436, Modderfontein, 1645, South Africa

#### **CAUTION / VERSIGTIG**

#### **WARNINGS**

#### Withholding periods:

Minimum time between the last application and harvest or feeding / grazing:	
Legume crops (grazing)	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.
- TORPEDO SC has been tested on the most important commercial cultivars. More susceptible cultivars
  may be released in the future which need to be tested; for this, apply TORPEDO SC 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 efficacious under all conditions. The action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label, the occurrence of resistance of weeds against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned, due to failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

### **PRECAUTIONS**

- 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.
- TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three (3) times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (<a href="https://www.croplife.co.za">www.croplife.co.za</a>). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.
- Destroy the empty container by perforation and flattening and dispose of it in a safe way.
- Never re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

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### **USE RESTRICTIONS**

- Do not use TORPEDO SC alone or in tank -mixtures 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, PRECAUTIONS and DIRECTIONS FOR USE 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 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, Ultramoc Xtra EC, Signet 915 EC or Acetak EC.
- <u>NOTE</u>: Where a new cultivar is encountered, large areas should not be sprayed without prior testing of TORPEDO SC on that cultivar.

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

- o 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 (H<sub>2</sub>O) of lower than 5.0 and / or organic material content higher than 3 % may result in poor weed control efficacy.
- 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.
  - $\circ$  where such compounds have been placed in-furrow.
- Do not apply organophosphate products within six (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.
- Do not apply TORPEDO SC or TORPEDO SC tank mixtures post-emergence of cowpeas, groundnuts or soybeans.

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

Soybeans, 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 2 herbicide. Any weed population may contain individuals naturally resistant to **TORPEDO SC** and other group code 2 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 200 SC** or any other group code 2 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** 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) (Acetochlor), **PREFIX S EC** (L 7362) (**Acetochlor + Dichlormid**), **ULTRAMOC S EC** (L 7342) (**Metolachlor + Dichlormid**), **UNIMOC EC** (L 7341) (**Metolachlor)**, **ULTRAMOC XTRA EC** (L 8878) (**Metolachlor + Benoxacor)**, **SIGNET 915 S EC** (L 9071) (**S-metolachlor + Benoxacor**) and most pyrethroid insecticides.

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## **APPLICATION METHODS**

An optimum crop seed planting depth of 50 to 75 mm for groundnuts and 20 to 60 mm for soybeans (depending on the seedbed and soil conditions) 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 to 300 litre per hectare 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 to15 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 a shallow cultivation, which will also incorporate the herbicide into the upper 10 to 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 litres per hectare.

**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 litres water per hectare, as an overall application. If band treatment is practiced, proportionately less spray mixture should be used per hectare.

## **RECOMMENDATIONS**

# 1. 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 (mt/ha)	PLUS	Ultramoc S EC (t/ha)	OR	Prefix S EC (t/ha)	Timing Of Application
<u>Maize</u>	0 to 10	70		0.75		0.75 to 1.25	Apply to a well- prepared seedbed after
	11 to 20	100		1.0		1.25 to 1.75	planting but before crop and weed emergence.
	21 to 30	125		1.4		1.75 to 2.0	Use the higher rate for extended and improved
	31 to 40	150	PLUS	1.6	OR	2.0 to 2.25	control of broadleaf weeds, crab finger
	> 41	170		1.8		2.25	grass and yellow nutsedge. Use the higher rate on soils with > 1.0 % organic matter content.

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

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<u>Table 2</u>. TORPEDO SC in tank mixture with Signet 915 EC for broad spectrum pre-emergence weed control in Maize.

Crop	% Clay	TORPEDO SC (mt/ha)	PLUS	Signet 915 EC (mt/ha)	Timing Of Application
<u>Maize</u>	0 to 10	70		400 to 650	Apply to a well-prepared seedbed after planting but before
	11 to 20	100		400 to 650	crop and weed emergence.
	21 to 30	125	PLUS	500 to 700	Use the higher rate for extended and improved control of
	31 to 40	150		600 to 700	broadleaf weeds, Crab finger grass and Yellow nutsedge.
	41 to 50	170		600 to 800	Use the higher rate on soils with > 1.0 % organic matter content.

Table 3. TORPEDO SC plus Prefix S EC or Acetak EC for broad spectrum weed control in Groundnuts.

Crop	% Clay	TORPEDO SC (mt/ha)	PLUS	Prefix S EC (t/Ha)	OR	Acetak EC (t/Ha)	Timing Of Application
Groundnuts	0 to 10	70		0.8		0.75	Apply to a well-prepared seedbed after planting but
	11 to 20	100		1.1		1.0	before crop and weed emergence. Use the higher rate for
	21 to 30	125	PLUS	1.1 to 1.6	OR	1.0 to 1.5	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.

Use the correct rates for different row and band widths.

<u>Table 4</u>. TORPEDO SC plus Unimoc EC for broad spectrum weed control in Soybeans and Groundnuts.

Crop	% Clay	TORPEDO SC (mt/ha)	PLUS	Unimoc Ec (t/ha)	Timing Of Application
Soybeans and	0 to 10	70		0.65	
<b>Groundnuts</b>	11 to 20	100		0.9	Apply to a well-prepared
	21 to 30	125	PLUS	1.2	seedbed after planting
	31 to 40	150		1.4	but before crop and weed
	> 41	170		1.6	emergence.

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

NOTE: See "Use Restrictions".

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<u>Table 5</u>. TORPEDO SC plus Unimoc EC or Ultramoc Xtra EC for broad spectrum weed control in Green beans.

Crop	% Clay	TORPEDO SC (mt/ha)	PLUS	Unimoc EC (t/ha)	OR	Ultramoc Xtra EC (t/ha)	Timing of Application
Green beans	0 to 10	100		0.9		-	Apply to a well-prepared seedbed after planting but before crop and weed
	11 to 20	100	D	-		0.75 to 1.1	emergence.  Use the higher rate for
	21 to 30	125	PLUS	1.1 to 1.6	OR	1.1 to 1.5	extended and improved control of broadleaf weeds, Crab finger grass and Yellow nutsedge.
	> 30	-		-		1.5 to 2.0	Use the higher rate on soils with >1.0 % organic matter content.

NOTE

See "Use Restrictions".

# 2. POST-EMERGENCE

Сгор	TORPEDO SC (t/ha)	Remarks
Clovers, Medics & Lucerne	200 mℓ TORPEDO SC PLUS a 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/1 as such a mixture is antagonistic and poor control of annual grasses is likely to occur.

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WEEDS CONTROLLED BY TORPEDO SC plus ACETAK EC, ULTRAMOC S EC, UNIMOC EC or PREFIX S EC:				
PRE-EMERO	SENCE ONLY			
Botanical name	Common name			
Amaranthus hybridus	Common pigweed			
Bidens pilosa	Common blackjack / Spanish needle			
Brachiaria eruciformis	Sweet signal grass			
Chenopodium album	White Goosefoot, Lamb's quarters			
Chenopodium carinatum	Green goosefoot			
Chloris virgata	Feathertop Chloris			
Cleome monophylla	Spindlepod			
Dactylotenium aegyptium	Crowfoot			
Digitaria sanguinalis	Crab fingergrass			
Echinochloa crusgali	Barnyard grass			
Eleusine indica	Goose grass			
Galinsoga parviflora	Gallant soldier			
Panicum maximum	Common buffalo grass			
Panicum schinzii	Sweet buffalo grass			
Portulaca oleraceae	Common purslane			
Pseudobrachiaria deflexa	False signal grass			
Schkuhria pinnata	Dwarf marigold			
Setaria pallide-fusca	Red bristle grass			
Setaria verticillata	Sticky bristle grass			
Tagetes minuta	Khakhi weed			
Tragus berteronianus	Small carrot-seed grass			
Tragus racemosus	Large carrot-seed grass			
Tribulus terrestris	Dubbeltjie / Devil's Thorn			
Urochloa mosambicensis	Bushveld herringbone grass			
Urochloa panicoides	Herringbone grass			

VARIABLE CONTROL (PRE-EMERGENCE)				
PRE-EMERGENCE				
Botanical name Common name				
Cyperus esculentus Yellow nutsedge				

WEEDS CONTROLLED BY TORPEDO SC plus SIGNET 915 EC					
Botanical name Common name					
Digitaria sanguinalis	Crab Finger Grass				
Amaranthus hybridus	Common Pigweed				
Eleusine indica	Goose grass				
Chenopium album	Goose foot				
Acanthospermum hispidum	Bristly Starbur				
Echinochloa crusgalli	Barnyard Grass				
Nicandra physilloides	Apple of Peru				

SUPPRESSION (PRE-EMERGENCE)					
Botanical name Common name					
Cyperus esculentus Yellow nutsedge					

## **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.

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- Acetak EC, Prefix S EC, Signet 915 S EC or Unimoc EC or Ultramoc S EC or Ultramoc Xtra EC plus TORPEDO SC must be applied within two (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 seven (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.

#### POST-EMERGENCE ONLY ON CLOVERS, LUCERNE AND MEDICS

WEEDS CONTROLLED BY TORPEDO SC alone:	
Botanical name	Common name
Cenia turbinata	Goose daisy
Emex australis**	Spiny emex
Erodium moschatum *	Musk herons' bill
Raphanus raphanistrum **	Wild radish
Malva parviflora	Small mallow

<sup>\*</sup>Variable control may be expected.

#### 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.

ACETAK EC (L 6904), PREFIX S EC (L 7362), ULTRAMOC S EC (L 7342), UNIMOC EC (L 7341), ULTRAMOC XTRA EC (L 8878) and/en SIGNET 915 S EC (L 9071) are registered products of / is geregistreerde produkte van MERIDIAN AGROCHEMICAL COMPANY (PTY) LTD.

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<sup>•</sup> The growth stage of *Emex australis* should be at the 2 true leaf stage (1<sup>st</sup> 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.

<sup>\*\*</sup>Maximum growth stage at application should not be > 5 to 10 cm diameter.