



META SUPER 600 SC

Reg. No. L10966, Act No. 36 of 1947 | Reg. Nr. L10966, Wet Nr. 36 van 1947

A suspension concentrate herbicide for selective pre- and post-emergent control of most annual broadleaf weeds and some annual grasses in maize and when applied as a directed application in apples, avocados, mangoes, vines, citrus.

'n Suspensie-konsentraat onkruidoder vir selektiewe bestryding van voor- en na-opkoms van die meeste eenjarige breëblaaronkruid en sommige eenjarige grasse in mielies, en indien toegedien as 'n gerigte toediening in appels, avokado's, mango's, wingerde, sitrus.

HERBICIDE GROUP CODE C1(5) & K3 ONKRUIDDODER GROEPKODE

ACTIVE INGREDIENT | AKTIEWE BESTANDDEEL:

terbuthylazine (triazine) 497,2 g/l terbutielasien (triasien)

S-metolachlor(chloro-acetanilide) 102,8 g/l S-metolachloor (chloorasetanilied)

Manufactured for and registered by/Vervaardig vir en geregistreer deur:

Sharda International Africa (PTY) LTD

Reg. No./Reg. Nr. 2010/002268/07

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BATCH NO. LOT NR.	
EXPIRY DATE VERVAL DATUM	

NET CONTENTS /
NETTO INHOUD

UN No./VN Nr. 3082

1 ℓ



CAUTION
VERSIGTIG



WARNINGS

- Poisonous if swallowed.
- Store in a cool place.
- Store away from food and feed.
- Keep out of reach of children, uninformed persons and animals.
- **Re-entry:** Do not enter treated area until spray deposit as dried unless wearing protective clothing.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed 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 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 the spray mist.
- Avoid skin contact.
- Wash with soap and water after use.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face.
- Do not mix and load within at least 15 m from boreholes, streams, rivers and dams.
- Do not apply within at least 15 m from boreholes, streams and rivers.
- Do not apply within 60 m from dams.
- Ensure that no back-siphoning to boreholes or dams takes place when product is applied through the irrigation system.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use. Dispose of reinstated where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Rinse the empty container three times with a volume of clean water equal to a minimum of 10% of the container.
- Add the rinse aide to the contents of the spray tank before destroying the container.
- Do not use the empty container for any other purpose.

RESISTANCE MANAGEMENT

For resistance management, **META SUPER 600 SC** is a group code C1 (5) and K3 herbicide. Any weed population may contain individuals naturally resistant to **META SUPER 600 SC** and other group code C1 (5) and k3 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly and exclusively in programs. These resistant weeds may not be controlled by **META SUPER 600 SC** or any other group code C1 (5) and K3 herbicides.

To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from different herbicide group codes.
- Integrate other control methods (chemical, cultural, biological) into weed control programs.

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

USE RESTRICTIONS

MAIZE

To avoid injury to follow-up crops the following waiting periods should be heeded:

1. Grain sorghum, maize and sugarcane - 0.
2. Dry beans, forage sorghum, groundnuts, potatoes, small grains, soybeans and sunflowers - 18 months.
3. All other crops - 24 months (a test planting is recommended).

TREE CROPS

- Do not apply tank mixtures of **META SUPER 600 SC** and Sharda glyphosate 360 SL to stone fruit trees.
- Do not apply tank mixtures of **META SUPER 600 SC** and Sharda glyphosate 360 SL to apples, avocados, citrus, mangoes, and vines within one year after transplanting. Avoid treatment of young interplants in established vineyards and orchards.
- Do not apply tank mixtures of **META SUPER 600 SC** and Sharda glyphosate 360 SL to apples, avocados, mangoes, citrus and vines suffering from trace element deficiencies, or growing on alkaline or poorly drained soils.
- Tank mixtures of **META SUPER 600 SC** and Sharda glyphosate 360 SL have a relatively long residual activity in the soil and susceptible crops such as winter cereals, legumes and vegetables should not be planted in soils treated with tank mixtures of **META SUPER 600 SC** and Sharda glyphosate 360 SL less than 18 months previously.
- Large weeds at the time of application may intercept the herbicide. This will have a detrimental effect on residual control of annual broad-leaved weeds.
- In order to avoid crop injury an appropriate application technique must be chosen which prevents green shoots (winter treatment), green bark (trees younger than 4 years), lower branches and leaves from being sprayed with tank mixtures of **META SUPER 600 SC** and Sharda glyphosate 360 SL.

IMPORTANT

The above-mentioned waiting periods are valid only if the correct dosage rate of **META SUPER 600 SC** according to soil type was applied and normal or above average rainfall occurred after **META SUPER 600 SC** application. When **META SUPER 600 SC** is applied to soils which expand on wetting and crack or crumble on drying out, such as turf soils, **META SUPER 600 SC** may remain active in the soil for much longer than the above-mentioned waiting periods. For this reason, **META SUPER 600 SC** should not be used on such soils if sensitive crops might be planted in the foreseeable future.

WEEDS CONTROLLED

MAIZE

The following weed species are normally well controlled by **META SUPER 600 SC** at the dosage rates and conditions as indicated below:

<p><i>Lolium</i> spp. <i>Erodium moschatum</i> <i>Raphanus raphanistrum</i> <i>Sonchus oleraceus</i> <i>Digitaria sanguinalis</i> <i>Eleusine indica</i> <i>Acanthospermum australe</i> <i>Acanthospermum glabratum</i> <i>Amaranthus hybridus</i> <i>Amaranthus thunbergii</i> <i>Bidens bipinnata</i> <i>Bidens pilosa</i></p>	<p>Ryegrass musk heron's bill wild radish sowthistle crab finger-grass goose grass eight-seeded prostrate starbur five-seeded prostrate starbur common pigweed red pigweed Spanish blackjack blackjack</p>
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<p><i>Chenopodium album</i> <i>Chenopodium carinatum</i> * <i>Commelina benghalensis</i> * <i>Cosmos bipinnatus</i> <i>Crotalaria sphaerocarpa</i> * <i>Cucumis myriocarpus</i> * <i>Datura ferox</i> * <i>Datura stramonium</i> <i>Galinsoga parviflora</i> <i>Gisekia pharnaceoides</i> * <i>Hibiscus cannabinus</i> <i>Hibiscus trionum</i> * <i>Ipomoea purpurea</i> <i>Nicandra physaloides</i> <i>Physalis angulata</i> <i>Portulaca oleracea</i> <i>Schkuhria pinnata</i> <i>Tagetes minuta</i> * <i>Tribulus terrestris</i> * <i>Xanthium strumarium</i></p> <p>Grasses <i>Chloris virgata</i> <i>Eleusine indica</i> <i>Panicum schinzii</i> <i>Setaria pallide-fusca</i></p>	<p>white goosefoot green goosefoot Bengal wandering Jew cosmos mielle <i>Crotalaria</i> striped wild cucumber large thorn apple thorn apple gallant soldier <i>Gisekia</i> kenaf bladderweed common morning glory Apple of Peru wild gooseberry purslane dwarf marigold khaki weed dubbeltjie cocklebur</p> <p>feathertop chloris goose grass sweet buffalo grass red bristle grass</p>
<p>These weeds are controlled by post-emergence applications of SORGOMIL GOLD 600 SC. Control by pre-emergence applications is variable.</p>	

Reliable control of the above-mentioned grasses is only obtained with pre-emergence applications of **META SUPER 600 SC**. This also implies reliable control if application is done after an interrow cultivation.

TREE CROPS AND VINES

The following weed species are normally controlled by a directed post-emergence application of a tank mixture of **META SUPER 600 SC** and Sharda glyphosate 360 SL at the dosage rates recommended below:

<p><i>Lolium</i> spp. <i>Erodium moschatum</i> <i>Raphanus raphanistrum</i> <i>Sonchus oleraceus</i> <i>Digitaria sanguinalis</i> <i>Eleusine indica</i> <i>Acanthospermum australe</i> <i>Amaranthus hybridus</i> <i>Anagallis arvensis</i> <i>Arctotheca calendula</i> <i>Bidens bipinnata</i> <i>Bidens pilosa</i> <i>Chenopodium album</i> <i>Conyza sumatrensis</i> <i>Echium lycopsis</i> <i>Erodium moschatum</i> <i>Galinsoga parviflora</i> <i>Hypochoeris radicata</i> <i>Ipomoea purpurea</i> <i>Lactuca serriola</i> <i>Medicago polymorpha</i> <i>Oenothera</i> spp. <i>Picris echioides</i> <i>Plantago lanceolata</i> <i>Raphanus raphanistrum</i> <i>Senecio consanguineus</i> <i>Sonchus oleraceus</i> <i>Tagetes minuta</i> <i>Triumfetta</i> sp.</p> <p>Grasses <i>Bromus diandrus</i> <i>Bromus unioloides</i> <i>Digitaria sanguinalis</i> <i>Eleusine indica</i> <i>Lolium</i> spp. <i>Panicum maximum</i> <i>Paspalum dilatatum</i> <i>Poa annua</i></p>	<p>Ryegrass Musk heron's bill Wild radish Sow thistle Crab finger-grass Goose grass eight-seeded prostrate starbur common pigweed pimpernel Cape marigold Spanish blackjack blackjack white goosefoot tall fleabane Patterson's curse musk heron's bill gallant soldier hairy wild lettuce common morning glory wild lettuce burclover primrose bristly ox-tongue narrow-leaved ribwort wild radish starvation Senecio sowthistle khaki weed klitsbossie</p> <p>ripgut brome rescue grass crab finger-grass goose grass ryegrass common buffalo grass common Paspalum winter grass</p>
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Hard-to-kill perennial grasses and perennial broad-leaved weeds may only be initially suppressed. Where ring or strip weeding is practised, a tank mixture of **META SUPER 600 SC** and Sharda glyphosate 360 SL does not prevent the treated area from being re-invaded by creeping weeds which are rooting outside the treated area.

The following broadleaf weeds are normally well controlled residually after an initial post-emergence application of tank mixture of **META SUPER 600 SC** and Sharda glyphosate 360 SL.

<p><i>Lolium</i> spp. <i>Erodium moschatum</i> <i>Raphanus raphanistrum</i> <i>Sonchus oleraceus</i> <i>Digitaria sanguinalis</i> <i>Eleusine indica</i> <i>Acanthospermum australe</i> <i>Acanthospermum glabratum</i> <i>Amaranthus hybridus</i> <i>Amaranthus thunbergii</i> <i>Bidens bipinnata</i> <i>Bidens pilosa</i> <i>Chenopodium album</i> <i>Chenopodium carinatum</i> <i>Galinsoga parviflora</i> <i>Gisekia pharnaceoides</i> <i>Hibiscus trionum</i> <i>Nicandra physaloides</i> <i>Physalis angulata</i> <i>Portulaca oleracea</i> <i>Schkuhria pinnata</i> <i>Tagetes minuta</i></p>	<p>Ryegrass Musk heron's bill Wild radish Sow thistle Crab finger-grass Goose grass eight-seeded prostrate starbur five-seeded prostrate starbur common pigweed red pigweed Spanish blackjack blackjack white goosefoot green goosefoot gallant soldier <i>Gisekia</i> bladderweed Apple of Peru wild gooseberry purslane dwarf marigold khaki weed</p>
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DIRECTIONS FOR USE: Use only as directed

COMPATIBILITY

The compatibility of **META SUPER 600 SC** with other products may be influenced by the formulation of the products involved as well as the quality of the water. Since the formulation of other products may change without the knowledge of Sharda International Africa and the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application. **META SUPER 600 SC** is compatible with Sharda glyphosate 360 SL and Sharda paraquat 200 SL.

MIXING INSTRUCTIONS

Shake well before use. Replace cap after pouring.

Half-fill the spray-tank with water and pour the required quantity of **META SUPER 600 SC** into the spray-tank while stirring.

Where **Sharda Halosulfuron 750 WDG** is used with **META SUPER 600 SC** the **Sharda Halosulfuron 750 WDG** must be added first. Top up the spray tank with water to the final volume required. When **Spyro 915 EC**/ **Falcor 960 EC** is added to **SORGOMIL GOLD 600 SC**, or a mixture of **META SUPER 600 SC** plus **Spyro 915 EC**/ **Falcor 960 EC** should be added last, prior to the final volume being obtained.

Ensure thorough agitation during filling and spraying operations.

Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank.

APPLICATION TECHNIQUES

Pre-emergence

META SUPER 600 SC may be applied on soils at or immediately after planting on a fine, even and firm seedbed, thoroughly cultivated immediately prior to planting, to ensure a weed free seedbed. Rainfall shortly after application is necessary to activate the herbicide. Thus, if after application dry conditions prevail for a period of 7 - 14 days weeds may emerge and develop. In such cases a shallow cultivation, e.g., with a rotary cultivator, must be carried out to destroy these weeds.

Post-emergence

META SUPER 600 SC may also be applied post-emergence before the broadleaf weeds have developed beyond the 4 - leaf stage. A grass killer should be applied pre-emergence to control the grass weeds. Where grasses were not controlled, or broadleaf weeds have developed beyond the 4 - leaf stage, these weeds must first be destroyed by cultivation and **META SUPER 600 SC** then applied onto clear soil. **Sharda Halosulfuron 750 WDG** may be applied with **META SUPER 600 SC** to control both nutsedges and dicot weeds.

Apply tank mixtures of **META SUPER 600 SC** and Sharda glyphosate 360 SL post emerge on actively growing weeds which are not under moisture or temperature stress. Rain or irrigation a few days prior to application will improve the control. Do not apply tank mixtures of **META SUPER 600 SC** and Sharda glyphosate 360 SL when the target weeds are wet or covered by a thick layer of dust. Always use clean water. Avoid the use of brackish or muddy water, or water with a high clay and/or silt content.

GROUND APPLICATION

META SUPER 600 SC may be applied with any medium or high volume sprayer equipped with an efficient agitation mechanism and which is 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 water. Tank mixtures of **META SUPER 600 SC** and Sharda glyphosate 360 SL may also be applied with a knapsack sprayer.

AERIAL APPLICATION

Aerial application of this product may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Remedies). It is important to ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria are met:

Application parameters:

- Volume:** A minimum volume of 30 litres per hectare (pre-emergence) and 35 litres per hectare (post-emergence) 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 the product is applied aerially at a lower volume rate than recommended above.
- Droplet coverage:** Droplet coverage of 20 - 30 droplets per cm² (pre-emergence) and 30 - 45 droplets per cm² (post-emergence) must be recovered at the target.
- Droplet size:** A droplet spectrum with a VMD of 350 - 400 microns (pre-emergence) and 300 - 350 microns (post-emergence) is recommended. Ensure that the production of fine droplets (less than 150 microns - high drift & evaporation potential) is restricted to a minimum.
- Flying height:** The height of the spray boom should be maintained at 3 - 4 metres above the target. Do not spray when aircraft is in a climb, at the top or during a dive, or when banking.

Equipment:

Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage but which will ensure the minimum loss of product either through end-drift (within target field) or ex-drift (outside target field). The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.

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

Meteorological conditions:

The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C. The addition of a suitable anti-evaporant is recommended if the VMD of the droplets is less than 200 - 250 microns.

Stop spraying if the wind speed exceeds 15 km/h.

Aerial application of this product must not be done under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur. Also note that the application of this product under temperature inversion conditions (spraying in or above the inversion layer) 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 the movement of the suspended spray cloud away from the target field.

It is essential to obtain an assurance from the aerial spray operator that the above requirements are met.

APPLICATION RATES

IMPORTANT

All dosage rates recommended below are for overall application. In the case of band application calculate the appropriate quantities to be used according to the band and row widths.

MAIZE (Pre-emergence) **META SUPER 600 SC** only

TABLE 1: Pre-emergence application rates of META SUPER 600 SC in maize:

Soil type	% Clay	META SUPER 600 SC (l/ha)
Sand	0-10	2.2
Loamy sand / sandy loam	11-20	2.6
Sandy clay loam	21-30	3
Heavier soils including turf	>30	NOT RECOMMENDED

META SUPER 600 SC plus Spyro 915 EC

To control other **annual grasses** (i.e., *Urochloa* spp., *P. schinzii* and *Digitaria* spp.) and **yellow nutsedge** (*C. esculentus*) **Spyro 915 EC** should be added to **META SUPER 600 SC** as recommended below:

TABLE 2: Pre-emergence application rates of META SUPER 600 SC plus Spyro 915 EC in maize:

Soil type	% Clay	META SUPER 600 SC (L/HA)	Spyro 915 EC
Sand	0-10	2.2	0.25
Loamy sand / sandy loam	11-20	2.6	0.4
Sandy clay loam	21-30	3	0.5
Sandy clay loam	31-40	3.7	0.6-1
Sandy clay	>40	NOT RECOMMENDED	

IMPORTANT

- On the soils of the North Western Free State and North West Province with 0 - 15 % clay a rate of 2.2 l/ha **META SUPER 600 SC** plus 0.25 l/ha **Spyro 915 EC** should not be exceeded.
- On soils with more than 30 % clay the higher rate of **Spyro 915 EC** may be used for improved control of *C. esculentus*.

META SUPER 600 SC plus **Spyro 915 EC** may not always control *Cleome monophylla* adequately and may sometimes not give adequate late season control of *mealie-Crotalaria* (*C. sphaerocarpa*).

MAIZE (Post-emergence)

META SUPER 600 SC and **Sharda Halosulfuron 750 WDG** may be used post-emergence in a tank mix to achieve control of *Cyperus* spp. and broadleaf weeds. Grasses should be controlled by means of pre-emergence application of **Spyro 915 EC**. Crop rotation with wheat and beans is possible if the application rates in Table 7 are followed. Consult the **Sharda Halosulfuron 750 WDG** label.

TABLE 3: Application rates of META SUPER 600 SC and Sharda Halosulfuron 750 WDG for post-emergence control of certain broadleaf weeds and nutsedges on maize:

	Sharda Halosulfuron 750 WDG (g/ha)	META SUPER 600 SC (L/ha)
Post emergence (All soil types)	50	1

CROP ROTATION

The above mentioned quantities of **META SUPER 600 SC** recommended in Tables 1 to 3 may damage triazine sensitive follow-up crops such as groundnuts, dry beans, soya beans, sunflowers, wheat, vegetables, cotton and tobacco. Where these crops are to be planted as follow-up crops the application rate of **META SUPER 600 SC** should not exceed 2,1 l/ha (Table 4). On soils with 0 - 10% clay in the North West Province and North Western Free State and high lime content soils, the lower rates of **META SUPER 600 SC** may still damage follow-up crops. These low rates may result in poorer broadleaf control and shorter residual effect especially on soils with more than 20 % clay. Post-emergence control of broadleaf weeds is recommended when crop rotation with sensitive crops is practised.

TABLE 4: SPYRO 915 EC applied pre-emergence or pre-plant incorporated followed by META SUPER 600 SC early post-emergence in a crop rotation situation:

Soil type	% Clay	Spyro 915 EC	Meta Super 600 SC
Sand	0-10	0.3-0.5	2.1
Loamy sand / sandy loam	11-20	0.5-0.6	2.1
Sandy clay loam	21-30	0.6-0.8	2.1
Sandy clay loam / sandy clay	31-40	0.8-0.9	2.1
Sandy clay / Turf	41-50	0.9-1.1	2.1

IMPORTANT:

- Where **SPYRO 915 EC**, **FALCOR 960 EC** or **Sharda Halosulfuron 750 WDG** is used in combination with **META SUPER 600 SC**, the conditions and use restrictions that are described on the label of the product involved also apply. Therefore, consult the appropriate label.

TREE CROPS AND VINES AS LISTED ON THE MAIN PANEL

TABLE 5: Application rates of a tank mixture of META SUPER 600 SC and Sharda glyphosate 360 SL:

Time of application	META SUPER 600 SC (L/HA)	Sharda Glyphoaste 360 SL (l/ha)
Winter rainfall area Initial post-emergence control of winter weeds or Germinated summer weeds	3.5-4.2 2.8	5-6 4
Summer rainfall area Control of weeds as listed. Use higher rate for larger weeds	2.8-4.2	4-6

REMARKS

- Allow 14 days between pruning and application.
- Use the higher application rate when grasses and difficult to control dicots, e.g. *P. echioides*, *E. moschatum* and *M. polymorpha* are the predominant weeds.
- Use the higher application rate where the weed size exceeds 30 cm.
- Slashing weeds taller than 30 cm prior to the application of a tank mixture of **META SUPER 600 SC** and Sharda glyphosate 360 SL will result in improved control, provided they have been allowed to re-grow to the recommended stage for treatment.
- Use a separate contact or systemic herbicide for controlling spots/patches of perennial weeds.
- Poor residual control of shallow germinating weeds, i.e. *T. minuta* can be expected when an application of the tank mixture of **META SUPER 600 SC** and Sharda glyphosate 360 SL on soils with low organic matter and/or clay content is followed by heavy rain or irrigation shortly after application.
- Tank mixtures of **META SUPER 600 SC** and Sharda Glyphosate 360 SL should preferably be used during the phase of active vegetative weed growth.
- Degree of control and duration of effect depends on weed species, weed size, growing conditions at and following the period of application, rainfall and soil organic matter content.
- A tank mixture of **META SUPER 600 SC** and Sharda glyphosate 360 SL rapidly stops growth of susceptible weeds. Visual symptoms will, however, only be noticeable 3 - 5 days after application. Weed control will take place 10 - 14 days after application depending on growing conditions and weed susceptibility.

Sharda Glyphosate 360 SL L8901
Falcor 960 EC L10483
Sharda Paraquat 200 SL L9432
Sharda Halosulfuron 750 WDG L10855
Spyro 915 EC L10839