SHAKIRA 400 SC

Distributed by: Harvest Chemicals
Registration Holder/Registrasiehouer Harvest Crop Solutions (Pty)Ltd.
Reg.No. 2014/187205/07
25 Dan Pienaar Road, Kloof, 3610 • Tel: +27 (0) 31 764 6315
Poison Helpline: 085 155 5777





Date of

manufacture









A suspension concentrate herbicide for use against annual winter grasses in leguminous pastures, canola and orchards as indicated in the winter rainfall region. 'n Suspensie konsentraat onkruiddoder vir gebruik teen eenjarige wintergrasse in peulgewasweidings, kanola en in boorde soos aangedui in die winterreenvalgebied.

READ THE LABEL BEFORE OPENING THE CONTAINER.

Batch No Reg. No. L 9587, Act No. 36 of 1947.

HRAC HERBICIDE GROUP CODE

Reg Nr 9587, Wet Nr. 36 van 1947

HRAC ONKRUIDODDER

GROEPKODE

AktieweBestandeel:

LEES DIE ETIKET VOORDAT HOUER OOPMAAK.

Propisamied (Bensamied) 400 g/l

Netto Volume

Vervaardigingsdatum

Lot Nr





Active Ingredient:

Nett Volume

Propyzamide (Benzamide) 400/g/{



CAUTION VERSIGTIG

400q/l

20^ℓ





WARNINGS

Withholding period: Wait 15 days after treatment before allowing grazing of leguminous pastures.

- · Harmful by swallowing.
- Avoid eye contact.
- Store away from food, feeds, seed and fertilizer.
- Store out of reach of children, uniformed persons and animals.

Re-entry interval: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by 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 weeds to 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, and the environment or harm to man or animal or for the 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 eat, drink or smoke while handling the product or before washing hands and face and changing clothes.
- Prevent contamination of food, feeds, drinking water and eating utensils.

When mixing:

- Wear eye protection (face shield). In case of contamination of eyes, flush at once with clean water for at least 15 minutes.
- Wear rubber gloves while handling the concentrate.
- In case of contact with skin wash immediately with plenty of clean water.
- When clothes are contaminated, wash skin and change clothing.
- Invert the almost empty container over the spray or mixing tank and drain for at least 30 seconds. After the flow has slowed down to a drip, rinse the container three times with volumes of water equal to a minimum of 10% of that of the container.
- Add the rinse water to the contents of the spray tank without upsetting the calibration.

During application:

- Avoid contact with the spray.
- Avoid drift to other crops, grazing, rivers, dams and non-target areas.

After application:

- Clean spray equipment thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.
- Destroy the empty container and do not use for any other purpose.
- Change to clean clothes and wash contaminated clothing.
- Wash yourself with soap and water.

USE RESTRICTIONS

Waiting periods before planting follow-up crops after application of SHAKIRA 400 SC:

- Brassicas (Broccoli, Brussels Sprouts, Cabbage, Canola, Cauliflower) 6 months.
- Beans, Onions and Potatoes 6 months.
- Cereals (Wheat, Barley, Oats, Rye)
- All other crops not mentioned above 12 months.

High temperatures and low or no rainfall shortly after application can have a negative influence on the effectiveness of **SHAKIRA 400 SC.**

RESISTANCE WARNING

Any weed population may contain individuals naturally resistant to this herbicide and other group code K1 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **SHAKIRA 400 SC** or any other group code K1 herbicide.

To delay weed 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 the control methods (chemical, cultural, biological) into weed control programmes.

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

GENERAL INFORMATION

Mode of Action: SHAKIRA 400 SC is a soil-acting herbicide with uptake occurring through the roots of germinating and newly emerged sensitive grasses. Sufficient rain or irrigation (≥15 mm) in one precipitation within 5 days of application is essential to leach the SHAKIRA 400 SC into the root zone of sensitive weeds.

Best results are obtained when **SHAKIRA 400 SC** is applied to a moist soil surface which has settled (due to rain or irrigation). The soil surface should be relatively fine, even and firm without large clods, it should be free of excessive organic and surface material (dead or rotting weeds, leaves, crop residues etc.).

• Note that **SHAKIRA 400 SC** should only be applied in winter as the herbicide is more active in cool conditions. Warmer conditions promote degradation and shorter residual effects.

<u>Mixing</u>: Half-fill the spray tank with water. Mix the required quantity of the SHAKIRA 400 SC with some water in a bucket or mixing tank. Keep the spray tank agitator running while the mixture of SHAKIRA 400 SC and the balance of water are added to the spray tank. Maintain continuous and thorough agitation during the mixing process and application.

Application: Use only correctly calibrated spray equipment with effective strong agitation in the spray tank. Choice and arrangement of flat fan nozzles must be such that an even distribution and optimum recovery of the herbicide on the soil is obtained. Apply **SHAKIRA 400 SC** in sufficient spray volume (150 litres and above) per hectare to ensure that the product reaches the soil surface as an evenly distributed spray. Too low a volume will result in the spray mix being intercepted by the foliage of the crop and/or weeds, or being affected by wind or groundspeed, resulting in uneven and/or inadequate distribution of **SHAKIRA 400 SC** on the soil surface. Even and adequate distribution of **SHAKIRA 400 SC** on the soil surface is important otherwise poor weed control is likely to result.

Use the prepared spray mixture immediately after mixing and do not allow to stand over for prolonged periods.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED General

- Apply only during the winter months.
- Planting under dry conditions can result in uneven germination of crops and weeds. This will result in variable weed control.
- Apply when annual grasses are preferably pre-emergence or up to early post-emergence (up to the 3 leaf stage) at the time of application.
- Pre-emerge treatments should be preferably on moist soil.
- Sufficient rainfall of 15 mm or more within 5 days after application is essential to leach the **SHAKIRA 400 SC** into the root zone of the weeds otherwise annual grass control will be variable.

(A) ESTABLISHED LEGUMINOUS PASTURES IN THE WINTER RAINFALL AREA

- Apply just after the first good winter rain when the soil is moist and soil temperatures are colder.
- A high and thick stand of the leguminous pastures must first be grazed down before application takes place to allow the SHAKIRA 400 SC to reach the soil surface.

Use the lower rate only if all the following conditions apply:

• Where no tillage has taken place (undisturbed soils) and under conditions of high rainfall early in the season and before the grasses have reached the 2-leaf stage.

The higher dosage should be applied if all the following apply:

Where tillage has taken place (loose soils) and under conditions of low rainfall and when the annual grasses are beyond the 2-leaf stage but not past the 3 leaf stage, as poor grass weed control may result.

(B) NEWLY ESTABLISHED LEGUMINOUS PASTURES IN THE WINTER RAINFALL AREA

- Apply only after the crop has emerged and it has formed 2 3 true leaves. (Crop plants younger than this stage can be damaged or killed).
- For effective control, annual grasses must not be older than the 3 leaf growth stage.
- After planting under either moist or dry soil conditions, sufficient follow up rain is required to ensure breaking up of clods and settling the seedbed, with resultant even germination of the crop and grasses. After application, at least 15 mm sprinkler irrigation or rain in one precipitation within 5 days is required to leach the **SHAKIRA 400 SC** to the root zone of the germinating grasses.
- Planting under dry conditions with very low or no sub-soil moisture can cause a cloddy seedbed, combined with insufficient follow up rain/irrigation can result in uneven germination of the crop and/or grasses. In this case application should be postponed until 100 % of the crop has emerged and developed 2 3 true leaves. Under such conditions application should not be considered unless at least 20 mm rain is expected within 5 days of applications. Grasses germinating after application from big soil clods not yet broken up or grasses that have developed past the 3 leaf stage at the time of application might not be controlled.

(C) APPLES/PEARS, GRAPES AND NECTARINES/PEACHES IN THE WINTER RAINFALL AREA

- Use SHAKIRA 400 SC only in dormant orchards and vineyards.
- If bud burst has taken place, the spray must be directed onto the soil. Do not allow any spray mist to contact the crop.
- Do not apply to nursery plants.
- Do not apply to orchards and vineyards within 10 months of transplanting.
- Do not spray directly on to transplants and established vin es and trees.

(D) CANOLA

• Only apply to canola with 2 or more true leaves.

Failure to follow the guidelines as above can result in poor annual grass control.

Poor control can also result when:

- Annual grasses germinate from deeper than the level to which the SHAKIRA 400 SC has leached (especially after deep cultivation):
- Annual grasses have already developed a strong root system;
- Big soil clods present as a result of the cultivation or planting process have not yet broken up at the time of spraying

CROP / PEST	DOSAGE	REMARKS
Leguminous Pastures (Medicago species and Trifolium species)	1.3 l -1.9 l 1.9 l	ESTABLISHED LEGUMINOUS PASTURES IN THE WINTER RAINFALL AREA See recommendations above. NEWLY ESTABLISHED LEGUMINOUS PASTURES IN THE WINTER RAINFALL AREA See recommendations above
Apples/Pears Grapes Nectarines/ Peaches	1.9 દે -3,8 દે	Apply in winter before bud burst. Apply pre-emerge of grass weeds or post-emerge of grass weeds not later than the 3 leaf growth stage. Use the lower rate for pre-emerge grass control and when the soil surface is clean and free organic plant material. Use the higher rate for post-emerge grass control. It is preferable that the soil surface has less than 10% plant material cover (plant litter, leaves, mulch, etc.).
Canola	1.9 ℓ	Only apply post-emerge to canola with 2 or more true leaves. Only apply post-emerge to grass weeds up to the 3 leaf growth stage.

ANNUAL GRASSES CONTROLLED

Avena fatua*	Common wild oats
Bromus diandrus*	Ripgut brome
Bromus catharticus*	Rescue grass
Hordeum murinum	Mouse barley
Lolium species	Ryegrass
Phalaris canariensis	Canary seed grass
Poa annua	Annual bluegrass
Triticum aestivum	Volunteer wheat
Vulpia myuros	Rat's tail fescue

* Note:

Deep germinating annual grasses e.g. *Avena* and *Bromus* species which germinate from soil depths below the **SHAKIRA 400 SC** layer will be poorly controlled.