

SHIRO[®]

HERBICIDE

GROUP 2 HERBICIDE

MAPP 17439

A water-dispersible granule formulation containing 50% w/w triflurosulfuron-methyl, a sulfonylurea for the control of broad-leaved weeds in sugar beet and fodder beet.

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

For 24 hour emergency information contact:
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120g



Warning

Suspected of causing cancer.

Very toxic to aquatic life with long lasting effects.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

If exposed or concerned: Get medical advice/attention.

Collect spillage.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

To avoid risk to human health and the environment, comply with the instructions for use.



IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crop: Sugar beet, fodder beet

Maximum number of applications: 4 per crop

Maximum individual dose (g product/ha): 30

Latest time of application: Before the leaves of the crop meets between rows

OTHER SPECIFIC RESTRICTION:

This product qualifies for inclusion within the Local Environmental Risk Assessment for Pesticides (LERAP) scheme. Before each spray operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with HSE's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

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SAFETY PRECAUTIONS

Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE gloves when handling the concentrate.

WEAR SUITABLE PROTECTIVE gloves when handling contaminated surfaces.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WASH CONCENTRATE from skin or eyes immediately.

DO NOT BREATHE SPRAY.

WASH HANDS AND EXPOSED SKIN before meals and after work.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

Environmental protection

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5m of the top of the bank of a static or flowing waterbody, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1m of the top of a ditch which is dry at the time of application.

DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1 m of the top of a bank of a static or flowing waterbody. Aim spray away from water.



Storage and disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

EMPTY CONTAINER COMPLETELY and dispose of safely.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

First aid information for use in the event of accidental exposure or ingestion.

Skin Contact: Wash off immediately with plenty of water. If symptoms persist, call a physician.

Eye contact: Bathe the eye with running water for at least 15 minutes. Seek medical advice.

Ingestion: Wash out mouth with water. Do not induce vomiting. Seek medical advice.

Inhalation: Move to fresh air. Seek medical advice.

If you feel unwell seek medical advice immediately and show label if possible.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the product label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

RESTRICTIONS

- SHIRO must not be applied to any crop suffering from stress as a result of drought,

waterlogging, low temperatures, pest or disease attack, nutrient or lime deficiency or other factors reducing crop growth.

- Due to the high level of activity of the herbicide, special care must be taken to avoid damage by drift onto plants outside the target area, or onto surface waters or ditches. Thorough cleansing of equipment is also very important - see below.
- Apply no more than four times to any sugar beet or fodder beet crop.
- Do not use on crops grown for seed.

WEED CONTROL:

SHIRO works mainly by foliar action. Tank-mixed with an herbicide partner it controls a wide range of broad-leaved weeds. It is most effective if applied when the weeds are small and actively growing. Good spray cover of weeds must be obtained.

Susceptible plants cease growth almost immediately after application and symptoms can be seen about 5 to 10 days after application. Best results are achieved when SHIRO plus approved tank-mix partner are applied in a programme of up to four sequential sprays. It is important to identify the weeds occurring in the crop and refer to the weed table to ensure that the weeds present are those susceptible to SHIRO plus appropriate tank-mix partner.

Weed resistance

SHIRO contains triflurosulfuron-methyl, a sulfonylurea, which is an ALS Inhibitor. Do not apply SHIRO in sequence or in tank mixture with any other product containing ALS inhibiting herbicides.

When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominating. A weed species is considered resistant to an herbicide if it survives a correctly applied treatment at the recommended dose. Development of resistance with a weed species can be avoided or delayed by alternating (or tank mixing) with suitable products having a different mode of action.

Susceptible weeds

The susceptibility ratings of weeds in the following table refer to good spray cover and good growing conditions, with weed size of up to 2 true leaves.

Weed species	SHIRO + 1.5 L/ha phenmedipham*	SHIRO + 1.5 L/ha phenmedipham* + 0.5 kg/ha metamitron
Black-bindweed	S	S
Charlock	S	S
Chickweed	S	S
Cleavers	S	S
Fat-hen	S	S

S = Fully susceptible; MS = Moderately Susceptible

* Using an 160 g/l formulation of phenmedipham

Weed species	SHIRO + 1.5 L/ha phenmedipham*	SHIRO + 1.5 L/ha phenmedipham* + 0.5 kg/ha metamitron
Field Pansy	MS ⁽¹⁾	S
Fool's Parsley	S	S
Fumitory	S	S
Knotgrass	S	S
Mayweed, Scentless	S	S
Red Dead-nettle	S	S
Redshank	S	S
Small Nettle	S	S
Volunteer Oilseed Rape	S	S

(1) For control of field pansy, increase the dose rate of phenmedipham to 2 L/ha

CROPS

SHIRO can be used on all varieties of sugar beet and fodder beet at the growth stages given below.

FOLLOWING CROPS

Following Crops - After applying SHIRO to a beet crop, only winter cereals should be sown in the same calendar year. Any crop may be sown or planted in the following spring (next calendar year) after a beet crop treated with SHIRO.

CROP FAILURE

In the event of crop failure for any reason, sow only spring barley, linseed or beet within four months of application of SHIRO, provided this agrees with the recommendations of any partner product. After four months from application, refer to "Following Crops" section.

TIMINGS

The first application should be made in the spring when the first weeds have emerged. Subsequent applications should be made every 5 - 14 days when new flushes of weeds are at or just past the cotyledon stage.

Do not apply SHIRO after the leaves of the crop have met between the rows. Do not apply SHIRO more than four times to any beet crop.

SHIRO mixtures can be applied from the early cotyledon stage of sugar beet or fodder beet as part of a planned programme following pre-emergence application of all UK approved pre-emergence herbicides.

Before spraying ensure that the sprayer is clean and in good working order. Check all hoses, filters and nozzles and replace if worn or damaged. Calibrate according to sprayer manufacturer's recommendations.

Apply SHIRO by one of the following methods.

VOLUME AND APPLICATION

BEFORE USING SHIRO, SPRAYING EQUIPMENT MUST BE CLEAN AND FREE FROM CONTAMINATION WITH OTHER PESTICIDES.

OVERALL APPLICATION

SHIRO should be applied overall in 80 - 150 litres of water per hectare, using suitable equipment to give a FINE spray, as defined by BCPC. Good, even spray cover of the weeds is essential for best results.

When applying SHIRO, care should be taken not to overlap spray swaths.

BAND APPLICATION

Similar doses, water volumes and spray quality should be used as in overall application, but the area covered will be dependent upon the row spacing and band width. Careful calibration is essential to achieve best results.

DOSE

SHIRO should be applied at 30 g/ha in conjunction with a recommended adjuvant or suitable herbicide tank-mix partner(s) (see weed susceptibility table).

SOIL

SHIRO can be used on all soil types. Weed control may be reduced when soil conditions are very dry.

WEATHER

Avoid high light intensity (full sunlight) and high temperatures (above 21°C) on the day of spraying. Avoid periods of substantial day to night temperature changes or when frost is expected.

MIXING

SHIRO mixes easily with water, but the following mixing procedure should be followed: Quarter fill the spray tank with water, start the agitation and add the required quantity of SHIRO directly to the tank or via an induction bowl when fitted, without prior creaming. Continue agitation while topping up the tank and while spraying. Use the tank the same day as mixing.

For mixing instructions with phenmedipham as a tank-mix partner, see Compatibility Section.

COMPATIBILITY

In any tank-mix, with the exception of phenmedipham, add SHIRO to the spray tank first and ensure it is fully dispersed before adding the partner product(s). If a partner product contains phenmedipham, follow the manufacturer's recommendations for mixing that product before adding SHIRO.

To widen the spectrum of activity, SHIRO should be tank-mixed with other herbicides. SHIRO can be tank-mixed with BEETUP FLO, BETTIX FLO and approved formulations of phenmedipham containing 160 g/L or metamitron containing 700 g/L. Products should only be tank-mixed if each product can be applied within the manufacturer's label recommendation.

When SHIRO tank-mixes are used in sequence with graminicides, the minimum time interval should be observed between applications in accordance with the manufacturer's recommendations.

Do not apply SHIRO in sequence or in tank-mix with a product containing any other sulfonyleurea. For the latest tank-mix compatibility information, please consult the UPL website – www.upl-ltd.com/uk.

WARNING

Extreme care should be taken to avoid damage by drift to broadleaved plants outside the target area or onto ponds, waterways or ditches or land intended for cropping. Spraying equipment should not be drained or flushed onto land planted with or intended for planting with trees or crops other than sugar beet or fodder beet.

SPRAY TANK CLEAN-OUT

TO AVOID SUBSEQUENT DAMAGE TO CROPS OTHER THAN SUGAR BEET, IMMEDIATELY AFTER SPRAYING SHIRO THOROUGHLY CLEAN ALL SPRAY EQUIPMENT INCLUDING INSIDE AND OUTSIDE OF LID USING ALL CLEAR® EXTRA SPRAYER CLEANER ACCORDING TO THE LABEL INSTRUCTIONS. ALTERNATIVELY USE THE FOLLOWING PROCEDURE:

1. Immediately after spraying, drain tank completely. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
2. Rinse inside of tank with clean water and flush through boom and hoses using at least one-tenth of the spray tank volume. Drain tank completely.
3. Half fill tank with clean water and add 1/3 litre household ammonia (contains 9.5% ammonia) for each 100 litres of tank volume. (Equivalent amounts of alternate strength ammonia solutions can be used providing the final concentration in the full tank is 0.03%).

Agitate and then flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is completely full and allow to stand for 15 minutes with agitation.

Again flush the boom and hoses and drain tank completely.

4. Nozzles and filters should be removed and cleaned separately with ammonia solution at the same concentration as used for the sprayer.

5. Rinse the tank with clean water and flush through the boom and hoses using at least one-tenth of the spray tank volume. Drain tank completely.

Note:

If it is not possible to drain the tank completely, step 3 must be repeated before going on to step 4.

Follow washout instructions and only use recommended tank-mixtures

Failure to thoroughly clean your sprayer after use can result in damage to sensitive crops sprayed later.

SHIRO is non-corrosive to equipment, non-flammable and non-volatile.

Avoid contamination of surface waters.

For disposal of washings, follow local guidelines.

Conditions of supply

All goods supplied by the company are of good quality and we believe them to be fit for purpose. However, as we cannot exercise control over their storage, handling, mixing or use or the weather conditions before, during or after application, which may affect the performance of the goods, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded, and no responsibility will be accepted by us or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in

the use of such goods. Brand names used in this label may be registered trademarks of UPL Europe Ltd, or other manufacturers in which propriety rights may exist.

EU supplier details (for Northern Ireland only):

UPL Holdings Coöperatief U.A.

Claudius Prinsenlaan 144 A, Blok A, 4818CP Breda, The Netherlands

To access the Safety Data Sheet for SHIRO
please use the link below or scan the code.



www.upl-ltd.com/uk/product-details/shiro

Alternatively, contact your local supplier.

