



BETASANA[®] SC

HERBICIDE

MAPP 14209

Suspension concentrate (SC) formulation containing 16% (160g/litre) of phenmedipham. Contains 1,2-benzisothiazolin-3-one.

For control of broad-leaved weeds in Sugar Beet, Fodder Beet, Red Beet and Mangels.



Warning

May cause an allergic skin reaction.

Causes serious eye irritation.

Toxic to aquatic life with long lasting effects.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

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.

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



IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL HERBICIDE

Crops/situations: For use in Sugar Beet, Red Beet, Fodder Beet and Mangels.

Maximum individual dose:	3 litres/ha
Maximum total dose:	6 litres/ha
Latest time of application:	Before crops meet between the rows

Other Specific Restriction

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD'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.

SAFETY PRECAUTIONS

OPERATOR PROTECTION

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

OPERATORS MUST WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

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

WASH CONCENTRATE from skin or eyes immediately.
WASH HANDS AND EXPOSED SKIN before meals and after work.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

ENVIRONMENTAL PROTECTION

To protect aquatic organisms respect an unsprayed buffer zone distance to surface water bodies in line with LERAP requirements. **DO NOT ALLOW DIRECT SPRAY** from horizontal boom sprayers to fall within 5 m of the top of the bank of a static or flowing water body, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone or within 1 m of the top of a ditch which



is dry at the time of application. Aim spray away from water. This product qualifies for inclusion within Local Environmental Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD'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.

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.

STORAGE AND DISPOSAL

KEEP AWAY FROM FOOD, DRINK OR ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

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

RINSE CONTAINER THOROUGHLY by using an integrated pressure rising device.

After use, thoroughly wash out the sprayer with a minimum of two flushes of water.

Add washings to sprayer at time of filling and dispose of safely.

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/WARNINGS

- The application of BETASANA SC to crops suffering from stress may lead to a check to growth from which the crops may not recover and in some cases crop losses may occur.
- If the temperature is 21°C or is likely to rise to this temperature for the period of twenty-four hours after application do not spray as serious crop damage can occur.
- If substantial day to night fluctuations in temperature occur shortly before or after the application crop growth may be checked.
- Weeds are best controlled at the seeding stage when growing actively in warm, moist, sunny conditions. Under poor growing conditions control may be reduced.
- BETASANA SC will not control perennial weeds.
- DO NOT apply to wet foliage or during rainfall or drizzle.
- DO NOT overlap spray bouts.
- DO NOT apply any of the residual herbicide mixtures more than three times.
- DO NOT apply a residual herbicide mixture to sand soils.
- DO NOT apply chloridazon mixtures on soils with more than 10% organic matter.
- DO NOT roll or harrow the crop within seven days before or after applying BETASANA SC.
- Avoid spray drift onto neighbouring crops.

WEEDS CONTROLLED

BETASANA SC should be used as a repeat low dose treatment when weeds are still small. Best control is achieved at the cotyledon stage. It is normal for a repeat low dose treatment to be applied as an overall spray.

BETASANA SC is a contact herbicide that is dependent for action on light and temperature. This affects both weed control and crop safety. It is therefore important that all instructions in this label are read and followed. This is particularly important for application under hot

conditions, to crops under stress and for tank mixtures. BETASANA SC is absorbed through the leaves of the weeds and affects should be seen within five to six days of spraying. Weed response will vary according to conditions at spraying and the stage of growth of individual weeds. Weeds are best controlled at the seeding stage when growing actively in warm, moist, sunny conditions. Under poor growing conditions control may be reduced.

Susceptible weeds quickly die and in warm weather will be dead in 3-4 days. More tolerant weeds may take longer to die. Under cool conditions results may not be complete for as long as 7-10 days. BETASANA SC will not prevent germination of weed seed after treatment and where this occurs further applications may be made provided the crop is in a healthy state and other conditions for safe use are complied with.

As BETASANA SC has only contact action it is not affected by soil type and can be used on organic and peaty soils as well as mineral soils.

	Susceptibility of weeds at cotyledon stage 3 x 2 l/ha	Susceptibility of weeds at cotyledon stage 2 x 3 l/ha
Annual meadow-grass	R	R
Black bindweed	MS	MS
Common chickweed	S	MS
Fat-hen	MS	MS
Field pansy	MR	MS
Field penny cross	-	MS
Knotgrass	MS	R
Scentless mayweed	MR	-
Redshank	-	R

S = susceptible

MS = moderately susceptible

MR = moderately resistant

R = resistant

TREATMENT OF CROPS

CROP TOLERANCE

All varieties of Sugar Beet, Fodder Beet and Mangels can be sprayed at any stage of growth if healthy, however, **do not** apply to Red Beet before the crop has reached the fully expanded cotyledon stage. Timing should be determined by the stage of growth of the weeds present. The safety of BETASANA SC to the beet crop will vary with conditions around the time of application. As the beet plants are small and grow rapidly they can be affected by almost any change in conditions and can become stressed. This may not always be visible until affected by other factors such as herbicide spray.

The application of BETASANA SC to crops suffering from stress may lead to a check to growth from which the crops may not recover and in some cases crop losses may occur. The most important causes of stress are listed below:

• HIGH TEMPERATURES

If the temperature is 21°C or is likely to rise to this temperature for the period of twenty four hours after application, do not spray as serious crop damage can occur. Where temperatures have been as high as 21°C and are falling, BETASANA SC may be applied at a reduced rate but some reduction in weed control should be expected. This is particularly useful in the evening after a hot day. A return to temperatures of 21°C and above in the following day may cause some check to the crop but this will normally be outgrown. If substantial day to night fluctuations in temperature occur shortly before or after the application crop growth may be checked.

• HIGH LIGHT INTENSITY

As BETASANA SC is activated by light, bright cloudless days may cause BETASANA SC to check the growth of the crop especially if it is already under another stress.

• NUTRIENT DEFICIENCY

Crop suffering from nutrient deficiencies such as nitrogen, copper, manganese, magnesium or lime may be adversely affected when sprayed with BETASANA SC. Growers should ensure that

nutrient status if the soil is correct before the crop is drilled.

• EFFECTS OF OTHER HERBICIDES

Damage or stress from pre-planting or pre-emergence herbicides can be increased by application of BETASANA SC. When such damage or stress is apparent allow the symptoms to disappear before applying the BETASANA SC.

• DAMAGE FROM INSECT, OTHER PESTS OR FUNGAL ATTACK

This will reduce the plants tolerance to BETASANA SC and the effects of such pest attack as mangel fly should be alleviated before application of BETASANA SC.

• FROST

Plants treated with BETASANA SC may be more affected by frost following treatment than untreated crops.

• HAIL OR WIND

Plants suffering from hail damage or wind damage due to either rocking in the soil or from wind borne soil particles should not be treated until the effects of this damage have been outgrown.

REPEAT LOW DOSE PROGRAMME

This programme depends on the application at a very early stage of weed growth. This can then be followed with repeat doses at the same rate of use as further weeds appear. Timing is very important and great care must be exercised in monitoring the appearance of weed seedlings so that they do not become too large.

• TIMING

Apply when the weeds have their cotyledons fully expanded. In a mixed weed population, timing should be determined by the most forward plants. Where occasional isolated weeds become established ahead of normal weed populations they will generally be held in check by a programme of treatment. Spray whenever any weeds reach the stage of growth above.

• **RATES OF USE**

2 litres BETASANA SC per hectare for a treatment programme of 3 applications or 3 litres per hectare for a treatment of 2 applications.

Ideally apply Betasana SC in tank mix with other sugar beet herbicide products as part of a low volume programme. Supported tank mixes can be found on the UPL website www.upleurope.com

• **APPLICATION**

Apply overall as a FINE spray (BCPC definition). Application must only be 80-100 litres of water per hectare. Even cover with a fine spray is essential for good results. The water volumes and nozzles used should be selected to achieve this aim.

Do not tank mix water volume in excess of 100l/ha as nozzle blockage may occur.

MIXING

Half fill the spray tank with water and commence agitation. Add the tank-mix partner first and allow complete dispersion. Add the required amount of BETASANA SC to the sprayer tank and fill up with water whilst agitating. Use immediately. Continue agitation until spraying is complete. Application should be completed within two hours of mixing as there is a risk of nozzle blockage, especially if the water temperature is lower than 5°C.

Do not tank mix BETASANA SC with manganese sulphate.

COMPATABILITY

The effectiveness of BETASANA SC can be extended by tank-mixing with other herbicides. These mixtures must be sprayed overall and form part of a low volume programme of treatments. Only recommended mixtures should be made and manufacturer's recommendations consulted before mixing.

The UPL website (www.upleurope.com) provides further information on tank mixtures.

CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable but, as we cannot exercise control over their storage, handling, mixing or use, or the weather conditions before, during and 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. Our staff or agents cannot vary these conditions whether or not they supervise or assist in the use of such goods.

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



<http://www.upleurope.com/product-list.html>

Alternatively, contact your local supplier.

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WASH HANDS AND EXPOSED SKIN before meals and after work.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

SHAKE WELL BEFORE USE PROTECT FROM FROST

ENVIRONMENTAL PROTECTION

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DO NOT ALLOW DIRECT SPRAY

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RINSE CONTAINER THOROUGHLY by using an integrated pressure rising device.

After use, thoroughly wash out the sprayer with a minimum of two flushes of water.

Add washings to sprayer at time of filling and dispose of safely.

For Batch Number and
Manufacturing Date see container

UPL Europe Ltd

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For 24 hour emergency information contact:
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The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.