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BAYER

Sencorex® flow

5 L e

Herbicide

For use only as an agricultural herbicide with contact and residual action for use in early and maincrop potatoes.

A suspension concentrate formulation containing 600 g/L metribuzin

For Professional use only

Authorisation holder:
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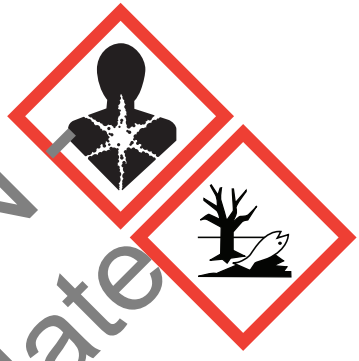
Safety information

SENCOREX FLOW

Contains 600 g/L metribuzin



Warning

May cause damage to organs (liver, kidneys) through prolonged or repeated exposure if swallowed. Very toxic to aquatic life with long lasting effects.

Do not breathe dust/fume/gas/mist/vapours/spray.
Get medical advice/attention if you feel unwell.
Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site, except for triple rinsed 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.

PCS No. 04361

SAFETY PRECAUTIONS

Operator Protection

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

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate, handling contaminated surfaces or applying the product.

WHEN USING, DO NOT EAT, DRINK OR SMOKE.

WASH CONCENTRATE from skin or eyes immediately.

AVOID ALL CONTACT BY MOUTH.

DO NOT BREATHE SPRAY.

WASH HANDS AND EXPOSED SKIN before meals and after work.

IF YOU FEEL UNWELL, seek medical advice (show the label where possible)

If swallowed, seek medical advice immediately and show this container or label.

Environmental Protection

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.

Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.

To protect aquatic organisms respect an unsprayed buffer zone of 5m to surface water bodies.

Aim spray away from water.

Use appropriate containment to avoid environmental contamination.

Storage and Disposal

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.

Keep out of reach of children.

Keep away from food, drink and animal feedingstuffs.

READ ALL INSTRUCTIONS CAREFULLY BEFORE USE

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To access the **Safety Data Sheet** for this product scan the code or use the link below:

www.bayercropscience.ie/sds/sencorexflow.pdf

or alternatively contact your supplier

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Bayer

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RATE OF USE

Crops/situations	Maximum individual dose (L product/ha)	Maximum total dose (L product/ha/crop)	Latest time of application
Potato (early), potato (maincrop)	1.15	1.15	Pre-crop emergence
	AND	-	-
	0.55 (see other specific restrictions)	0.55 (see other specific restrictions)	Before the shoots of potatoes reach 15 cm in length

Other specific restriction: The maximum total dose for 1st earlies is 1.15 L product/ha applied pre-crop emergence only

DIRECTIONS FOR USE

DESCRIPTION

Sencorex Flow is a selective herbicide, containing metribuzin 600 g/L, with contact and residual properties, acting by both leaf and root uptake for the control of annual weeds in early and maincrop potatoes. Sencorex Flow may be applied pre-emergence on the listed early and maincrop potato varieties.

Post-emergence application may be made to the listed maincrop varieties. The contact action of Sencorex Flow becomes apparent 7–14 days following application to germinating weeds.

RESTRICTIONS

DO NOT treat the textural group of soils known as 'Sands'.

HERBICIDE RESISTANCE MANAGEMENT

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 to be resistant to a herbicide if it survives a correctly-applied treatment at the recommended dose. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Guidelines have been produced by the Weed Resistance Action Group and copies are available from Teagasc, your distributor, crop adviser or product manufacturer.

WEEDS CONTROLLED

Weed	Pre-emergence weed control	Post-emergence weed control up to 1 true leaf stage †	Weed	Pre-emergence weed control	Post-emergence weed control up to 1 true leaf stage †
Black-bindweed	MS*	S*	Mercury, Annual	MS	S
Black-grass	S	MS	Nettle, Annual	S	S
Bugloss	S	S	Nightshade, Black	R	MS
Charlock	S	S	Oilseed rape volunteers	S	S
Chickweed, Common	S	S	Orache, Common	S	S
Cleavers	R	R	Pansy, Field	S	MS
Clovers	S	S	Penny-cress, Field	S	S
Dead-nettle, Henbit	S	S	Persicaria, Pale	S	S
Dead-nettle, Red	S	S	Pimpernel, Scarlet	S	S
Fat-hen	S	S	Poppy, Common	S	S
Forget-me-not, Field	S	S	Redshank	S	S
Fumitory, Common	S	S	Shepherd's-purse	S	S
Groundsel	S †	S †	Ryegrass, Perennial	S	S
Hemp-nettle, Common	S	S	Scutch/Couch, Common	R	R*
Hemp-nettle, Large flowered	S	S	Shepherds-purse	S	S
			Sorrel, Sheep's		S
Knotgrass	S	MS	Sow-thistle, Smooth	S	MS
Marigold, Corn	--	MS	Speedwells	S	S
Mayweeds	S	S	Spurrey, Corn	S	S
Meadow-grass, Annual	S	S	Wild oat*	*	*

S = Susceptible – Complete or near complete kill MS – Moderately susceptible – Good kill under favourable conditions
R = Resistant – No useful effect * Refer to section on "Specific Weed Situations"
-- = Insufficient information at present
† = Strains of groundsel resistant to Sencorex Flow can develop and are known to exist. The use of Sencorex Flow in such situations may be ineffective and may not give satisfactory control. Most susceptible annual broadleaved weeds are well controlled beyond the 1st true leaf stage. Perennial broadleaved weeds and grasses are not controlled.

Specific Weed Situations

Later Germinating Weeds, especially black-bindweed

Early germinating weed seedlings will be controlled by a normal application of Sencorex Flow, but if necessary a follow-up application of Sencorex Flow at 0.55 L/ha can be applied to most recommended maincrop varieties* to control later germinating seedlings, particularly black-bindweed, before the most advanced potato shoots have reached 15 cm (6") in length.

*Refer to 'varietal tolerance' table for further details.

Black-bindweed

This weed is best controlled at the cotyledon to 2 true leaf stage - it is less sensitive to pre-emergence applications.

Common Couch grass (Scutch)

Where Sencorex Flow has been applied pre-emergence a recommended graminicide used according to manufacturer's instructions may be applied post-emergence provided 3 weeks has elapsed between applications and that the Scutch is growing actively.

Other Perennial Grass Weeds

In situations where potatoes follow grass an autumn herbicide treatment or cultivations should be used to kill out the sward. Shoots appearing from any surviving turves may be controlled post-planting using an approved contact herbicide according to manufacturer's instructions.

Subsequent seedling weed control can then be obtained using a post-emergence application of Sencorex Flow.

Wild oat

Sencorex Flow will give some control of germinating seedlings up to the 2 leaf stage but not seedlings germinating from considerable depth. Where infestation is severe it is suggested that the first flush can be controlled by cultivations, or with an approved contact herbicide applied according to the manufacturer's instructions followed by Sencorex Flow post-emergence (on maincrops* only) for further control of later germinating wild oats and for seedling weed control.

Factors Affecting Activity of Sencorex Flow

Cultivations should produce a soil tilth that requires no further improvement after planting. Cultivation after spraying will encourage weed germination and reduce the residual activity of Sencorex Flow.

For good control of weeds germinating after application the soil should be moist at the time of treatment and the ridges well rounded with few clods. Dry soil conditions may reduce the activity of Sencorex Flow and weed control may be less satisfactory.

Where the soil is cloddy it is advisable to increase the volume of water.

On mineral soils with a high organic matter content and on peaty or organic soils, the residual activity of Sencorex Flow may be reduced.

On stony or gravelly soils there is a risk of crop damage especially if heavy rain falls soon after application.

CROP SPECIFIC INFORMATION

Maincrop Potatoes

Varieties Suitable for Treatment

Sencorex Flow can be applied pre-emergence on the listed maincrop varieties*. Post-emergence applications may be made to the listed maincrop varieties*, but not after the most advanced shoot's have reached 15 cm (6 in) in length.

Application should not be made beyond this stage. Occasionally when Sencorex Flow is applied after crop emergence, slight yellowing may occur (particularly in Kerr's Pink) which is normally out-grown without affecting yield; this occurs more frequently when application is made under hot, sunny conditions. For best results Sencorex Flow should be applied when the majority of weeds are at the cotyledon to 1 true leaf stage.

* Refer to 'varietal tolerance' table for further details.

Early Potatoes (First and Second earlies)

Sencorex Flow should be applied pre-emergence only on the listed first and second early varieties*. Potato shoots emerged at the time of spraying will be yellowed and may be scorched. Before applying Sencorex Flow to early potatoes it is important to refer to the section on 'Succeeding Crops'.

Soil Type #	Sencorex Flow L/ha		
	First Earlies	Second Earlies	Maincrop
Very Light and Light Soils	0.85	0.85	1.15
Medium and Heavy Soils	1.15	1.15	1.15 †
Organic and Peaty Soils	1.15 †	1.15 †	1.15 †

† persistence and residual activity and weed control may be less than the listed susceptibilities on these soil types

A "top-up" dose of 0.55 L/ha may be applied early post-emergence to named varieties on the soil types listed above providing the most advanced shoots have not reached 15 cm in length.

Do not exceed a maximum total dose of 1.7 L/ha.

* Refer to 'varietal tolerance' table for further details.

Application

Sencorex Flow should be applied in not less than 200 litres of water per hectare. Ensure that the boom is set at the correct height and that an even coverage to both sides of the potato ridge is obtained. When applying Sencorex Flow post-emergence it is particularly important to achieve good penetration so that weeds shaded by the crop are covered with spray mist. For optimum results avoid spraying in windy conditions.

Before application to early potatoes it is important to refer to the section 'Following crops'.

Drift

Take care to avoid drift onto neighbouring plants and crops, particularly sensitive crops which include sugar beet, lettuce and brassicas.

Temporary Plastic Mulches

Sencorex Flow at traditional rates of use may be applied pre-emergence of suitable* early varieties of potatoes prior to covering with plastic mulches. Application of Sencorex Flow to well prepared clod-free ridges should be made in at least 200 litres of water per hectare.

Weed control by Sencorex Flow is dependent upon adequate soil moisture being present to allow sufficient uptake of the product by seedling weeds. If the soil moisture status is low at application weed control will be impaired. The soil should, therefore, be thoroughly wetted by irrigation or rainfall before the plastic mulch is applied.

On mineral soils with high organic matter content or peaty or organic soils the residual activity of Sencorex Flow may be reduced, resulting in inadequate weed control.

Factors affecting crop tolerance

On stony or gravelly soils there is a risk of crop damage especially if heavy rain falls soon after application.

Occasionally when Sencorex Flow is applied after crop emergence and under unfavourable growing conditions, yellowing of the foliage may occur (which is normally outgrown). These symptoms occur more frequently if spraying is carried out within 3 days after a period of cool, cloudy weather and particularly if a sudden change to hot, sunny conditions occurs at the time of spraying. Whenever intensive sunshine and high daytime temperatures prevail, spraying should be delayed until evening.

Some cultivars may be sensitive to post-emergence applications of Sencorex Flow where a previously applied residual herbicide still remains in the soil or if the crop is under stress, eg from such factors as physical damage, virus diseases, blackleg, nematodes, *Rhizoctonia* excessive alkalinity or acidity. In some cases damage may occur which will not be outgrown.

Varietal tolerance to Sencorex Flow

Pre-emergence applications

First Earlies

- All commercially available varieties may be treated, except those grown on sands. Refer to the "Following crops" section before application.

Second Earlies

- All commercially available varieties except Fambo and crops grown on sands. Do not treat Shepody grown on sands or very light soils.

Maincrop

- All commercially available varieties except crops grown on Sands. Do NOT treat Maris Piper or Sante grown on 'Sands' or 'Very Light Soils' (ADAS '85 Classification).

For information on **new** potato varieties please contact Bayer CropScience Limited or your Sencorex Flow distributor.

Sencorex Flow may be applied in accordance with the "Application" section above.

Post-Emergence applications

The following varieties may be treated post-emergence providing the shoots are no longer than 15cm.

Maincrop

Arran Banner	Glamis	Majestic	Redskin
Bintje	Golden Wonder	Navan	Rembrandt
Cara	Jewel	Pentland Crown	Robinta
Cultra	Kerr's Pink	Pentland Dell	Romano
Desiree	King Edward	Pentland Squire	Up-to-Date
Diana	Kingston	Pink Fir Apple	Vivaldi
Famosa	Kirsty	Record	

Do NOT treat the following maincrop varieties post-emergence

Agria	Draga	Morag	Russet Burbank
Ailsa	Fianna	Morene	Sante
Atlantic	Harmony	Obelix	Saturna
Avalanche	Hermes	Pentland Hawk	Shasta
Brodick	Kondor	Pentland Ivory	Sierra
Buchan	Lady Rosetta	Picasso	Sovereign
Cabaret	Maris Piper	Prevalent	Stemster
Caesar	Markies	Redstar	Symfonia
Cosmos	Maxine	Remarka	Valor
Cramond	Melody	Rooster	Victoria

First and second Earlies
Do NOT treat post-emergence

For information on **new** potato varieties please contact Bayer CropScience Limited or your Sencorex Flow distributor.

FOLLOWING CROPS and CROP FAILURE

Before drilling or planting any succeeding crop the soil MUST be mouldboard ploughed to a depth of at least 15 cm (6") taking care to ensure that the furrow slice is inverted. Ploughing should be carried out as soon as possible (preferably within 3-4 weeks) after lifting the potato crop, **but certainly no later than the end of December.**

In the Same Year

Provided at least 16 weeks have elapsed after the application of the recommended rate of Sencorex Flow, the following crops, may be grown: ryegrass, cereals and winter bean

In the Following Year

In the Spring of the year following Sencorex Flow usage, any crop apart from lettuce or radish may be grown. Lettuce and radish crops are particularly sensitive to metribuzin and should not be grown in the year after Sencorex Flow usage

MIXING

Half-fill the spray tank with clean water. Commence agitation. Steadily add the recommended quantity of Sencorex Flow to the spray tank (pre-mixing is not necessary). Complete filling and maintain agitation of the suspension before and during spraying until the tank is empty. Spray immediately after mixing.

Tank mixing

When tank mixing it is important that the appropriate manufacturer's literature recommendations are followed and care taken to ensure applications are made within the recommendations for both products.

COMPATIBILITY

Sencorex Flow may be applied as a tank-mix with a range of products. Contact Bayer CropScience for compatibility information on specific tank-mixes. Full manufacturer's instructions must be followed for each tank-mix component.