HERBICIDE

HERBICIDE for the suppression of perennial grass weeds and the control of annual grass and broad-leaved weeds in forage and grain maize.

Oil based dispersion concentrate containing 60 g/L nicosulfuron

MAPP No.: 16418

FOR PROFESSIONAL USE ONLY

PROTECT FROM FROST

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

GROUP B HERBICIDE

24-hour emergency number: 0032 14 58 45 45

Technical enquiries: 01480 403333

BELCHIM CROP PROTECTION

Marketing company: Belchim Crop Protection Ltd.
1b Fenice Court, Phoenix Park | Eaton Socon, St Neots, Cambridgeshire PE19 8EW
Tel 01480 403333 | Fax 01480 403444 | info-uk@belchim.com | www.belchim.co.uk

Specimen
SAFETY PRECAUTIONS

a) Operator protection
Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:
* WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACE SHIELD) when handling the concentrate. However engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
* WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.
* AVOID ALL CONTACT WITH SKIN.
* WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

b) 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 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.
* Where the product has a buffer zone of 5m or less (for horizontal boom sprayers without DRT) - a buffer zone of 1m from the top of the bank of a static or flowing water body will apply for hand-held spray application.
* Where the product has a buffer zone of >5m (for horizontal boom sprayers without DRT) - the same buffer zone from the top of the bank of a static or flowing water body will apply for hand-held spray application.
* This product qualifies for inclusion within the 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 observed. The results of the LERAP must be recorded and kept available for inspection 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.

c) Storage and disposal
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.

SAMSON EXTRA 6%: Oil based dispersion concentrate containing 60 g/L nicosulfuron

WARNING

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H319 Causes serious eye irritation
H410 Very toxic to aquatic life with long lasting effects

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P302+P352 IF ON SKIN: Wash with plenty of soap and water
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P333+P313 If skin irritation or rash occurs: Get medical advice/attention
P337+P313 If eye irritation persists: Get medical advice/attention.
P501 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

EUH210 Safety data sheet available on request
EUH401 To avoid risks to human health and the environment comply with the instructions for use

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.
IMPORTANT INFORMATION: FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

<table>
<thead>
<tr>
<th>Crop/Situations:</th>
<th>Max. individual dose: (L product/ha)</th>
<th>Max. number of treatments: (per crop)</th>
<th>Latest time of application:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forage and grain maize</td>
<td>0.75 L/ha</td>
<td>1 per crop</td>
<td>Up to and including 8 true leaf stage</td>
</tr>
</tbody>
</table>

**Other specific restrictions:**
- To avoid the build up of resistance do not apply this or any other product containing an ALS inhibitor herbicide with claims for control of grass-weeds more than once to any crop.
- Non-returnable containers must not be re-used for any purpose.
- 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 the ‘Local Environment Risk Assessment for Pesticides Horizontal Boom Sprayers’ booklet available from the HSE Chemicals Regulation Directorate’s website 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.

**DIRECTIONS FOR USE**

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

**RESTRICTIONS**
- Do not treat with SAMSON EXTRA 6% once a soil insecticide based on an organophosphate has been applied.
- Do not mix with foliar or liquid fertilisers.
- Under certain conditions, some transient yellowing and/or crop stunting and/or loss of vigour can be seen from 1 to 2 weeks after treatment (2 - 8 leaves of maize). This is quickly outgrown and no yield effect has been shown.
- Applications should not be made to maize crops that are under stress, as this may lead to incidences of more persistent crop damage. Apply product at the recommended dose rate to a healthy crop.
- Strains of some annual weeds (e.g. black-grass, wild-oats, and Italian rye-grass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop advisor or product manufacturer.
- Avoid the use of SAMSON EXTRA 6%, or any other ALS inhibitor herbicide, as a sole means of grass and broad-leaved weed control in successive crops.
- This product should not be used to control ‘light infestations’ of weeds.
- Avoid overlapping spray swaths, as considerable crop damage may occur which may not grow out and could lead to yield reductions.
- SAMSON EXTRA 6% can be used on all varieties of maize. In the case of particularly sensitive varieties, e.g. Abraxas, Fjord, Rival and Nancis, some crop damage may be caused from which recovery may not be complete.
- Due to its high level of activity, care must be taken to avoid damage by spray drift onto plants outside the target area.

**WEEDS CONTROLLED**

SAMSON EXTRA 6% can be used to control the following weeds in maize:
- Suppression of common couch (*Elymus repens*)

See specific information regarding the control of this weed under ‘Timing and rates of Use’.

**Control of Annual Grasses:**

<table>
<thead>
<tr>
<th>Common name</th>
<th>Latin Name</th>
<th>Dose rate L/ha</th>
<th>Control claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual meadow-grass</td>
<td><em>Poa annua</em></td>
<td>0.5 L/ha</td>
<td>Susceptible*</td>
</tr>
<tr>
<td>Italian ryegrass</td>
<td><em>Lolium multiflorum</em></td>
<td>0.5 L/ha</td>
<td>Susceptible#</td>
</tr>
<tr>
<td>Perennial ryegrass</td>
<td><em>Lolium perenne</em></td>
<td>0.5 L/ha</td>
<td>Susceptible#</td>
</tr>
</tbody>
</table>

*Only susceptible at the 2-4 leaf stage of the weed

#Susceptible from seed only, not from root-stock

Evidence suggests that 0.75 L/ha SAMSON EXTRA 6% will control the minor UK weed Cockspur grass (*Echinochloa crus-galli*) when applied at 2 leaves to early tillering stage of the weeds.

Evidence suggests that 0.5 L/ha SAMSON EXTRA 6% will control the minor UK weeds Green foxtail & Yellow foxtail (*Setaria spp.*) when applied at 2 leaves to early tillering stage of the weeds.
Control of Broad-leaved Weeds:

<table>
<thead>
<tr>
<th>Common name</th>
<th>Latin Name</th>
<th>Dose rate L/ha</th>
<th>Control claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common chickweed</td>
<td>Stellaria media</td>
<td>0.67 L/ha</td>
<td>Susceptible</td>
</tr>
<tr>
<td>Common amaranth</td>
<td>Amaranthus retroflexus</td>
<td>0.67 L/ha</td>
<td>Susceptible</td>
</tr>
<tr>
<td>Shepherd’s purse</td>
<td>Capsella bursa-pastoris</td>
<td>0.67 L/ha</td>
<td>Susceptible</td>
</tr>
<tr>
<td>Mayweeds</td>
<td>Matricaria spp.</td>
<td>0.75 L/ha</td>
<td>Susceptible</td>
</tr>
<tr>
<td>Fat hen</td>
<td>Chenopodium album</td>
<td>0.75 L/ha</td>
<td>Moderately Susceptible</td>
</tr>
<tr>
<td>Redshank</td>
<td>Polygonum persicaria</td>
<td>0.75 L/ha</td>
<td>Moderately Susceptible</td>
</tr>
<tr>
<td>Pale persicaria</td>
<td>Polygonum lapathifolium</td>
<td>0.75 L/ha</td>
<td>Moderately Susceptible</td>
</tr>
<tr>
<td>Common orache</td>
<td>Atriplex patula</td>
<td>0.75 L/ha</td>
<td>Moderately Susceptible</td>
</tr>
<tr>
<td>Black nightshade</td>
<td>Solanum nigrum</td>
<td>0.75 L/ha</td>
<td>Moderately Susceptible</td>
</tr>
<tr>
<td>Black bindweed</td>
<td>Fallopia convolvulus</td>
<td>0.75 L/ha</td>
<td>Moderately Susceptible</td>
</tr>
<tr>
<td>Knotgrass</td>
<td>Polygonum aviculare</td>
<td>0.75 L/ha</td>
<td>Moderately Resistant</td>
</tr>
</tbody>
</table>

Limited data indicate 0.75 L/ha SAMSON EXTRA 6% can control field pansy, groundsel and annual mercury. For moderately resistant weeds, the effectiveness is generally 60-80%. For moderately susceptible weeds, the effectiveness is generally 70-90%. For susceptible weeds, the effectiveness is generally 80-100%.

Weed Resistance
This product contains nicosulfuron which is an ALS inhibitor, also classified by the HRAC as ‘Group B’. Use only as part of a resistance strategy that includes cultural methods of control and does not use ALS inhibitors as the sole chemical method of grass-weed control. There is potential for resistance to develop to SAMSON EXTRA 6% if the product is used alone in monoculture over a number of years. SAMSON EXTRA 6% should be used in mixture or in sequence with herbicides with other modes of action, particularly in continuous maize, as part of a weed resistance management plan. Crop rotation, in which using herbicides with different modes of action, can be practised as an alternative to reduce risk of development of resistance.

CROP SPECIFIC INFORMATION
Timing and Rates of Use:
Suppression of common couch (Elymus repens):
Use: When used to control other weeds, applying the 0.75 L/ha dose of SAMSON EXTRA 6% at the 4-6 leaf stage of the couch will provide a useful level of control of Common couch. The efficacy is generally above 75%. Useful level of control of top growth will be seen in the year of application, but reduction of growth in the following year has not been investigated.

Control of Annual Grasses:
Use: Apply between 0.67 L/ha and 0.75 L/ha in 200 L/ha of water at 2-8 leaf stage of the crop, 2 leaves to early tillering of the weed.

Control of Broad-leaved Weeds:
Use: Apply between 0.67 L/ha and 0.75 L/ha in 200 L/ha of water at 2-8 leaf stage of the crop, 2 leaves to 6 leaves of the weeds. WARNING: In order to give maximum control of Fat hen the weeds must be growing well and not under any form of stress.

FOLLOWING CROPS
In normal crop rotation, after ploughing, winter wheat, winter barley, winter rye, and triticale can be sown. All other crops can be sown in the following spring. In case of plant-back situation (crop failure), maize and soybeans can be sown after ploughing.

MIXING AND SPRAYING
Preparation of the spray solution
Shake thoroughly the SAMSON EXTRA 6% container. Half fill the spray tank with clean water and begin agitation. Add the required quantity of SAMSON EXTRA 6% to the tank and complete filling. Continue agitation until spraying is completed.

Application
Application of SAMSON EXTRA 6% should be achieved by using conventional ground spraying equipment at water volumes of 200-400 L/ha.
Do not spray SAMSON EXTRA 6% if any rainfall is expected in the next 6 hours.

Tank cleaning procedure
The following cleaning procedure is recommended:
1. Drain tank completely then flush tank, boom and hoses with clean water. Drain again.
2. Half fill the tank with clean water and add a detergent (e.g. Bonus™-100 mL/200L water) or a sodium hypochlorite based solution. Flush through boom and hoses and then allow standing for 10 minutes with agitation. Drain completely.
3. To remove traces of detergent, rinse the tank with clean water and flush through booms and hoses.
4. Repeat step 2.
5. Nozzles and filters must be removed and cleaned separately with the detergent solution at the same concentration as above.
6. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.

SOIL CONDITIONS
SAMSON EXTRA 6% can be used on all soils (light, medium and heavy soils) and is unaffected by high organic matter.

STORAGE
Store the container at room or cool temperatures.

ISK Biosciences Europe NV, as the Seller, shall be under no liability (except for liability for death or personal injury resulting from the negligence of the Seller) whether in contract or in tort for or in respect of any loss or damage resulting from an arising out of the mixing or sequential use, of the goods with any other goods (whether the Seller or any third-party) otherwise than in accordance with the Seller’s Recommendations for Use, or resulting from or arising out of the use of the goods in or before abnormal weather conditions or in unusual soil conditions notwithstanding that such conditions may be known or may have been known to the Seller or on plant varieties not known to the Seller to be abnormally susceptible to damage by the goods.

To access the Safety Data Sheet for this product
scan the QR code or use the weblink below:

WEBLINK to specific data sheet on manufacturer’s website:
http://belchim.co.uk/pdf/MSDS/Samson_MSDS.pdf
Alternatively, contact your supplier.
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