Stratos® Ultra

A systemic herbicide for post-emergence control of annual and perennial grass weeds in winter and spring oilseed rape, sugar beet, fodder beet, mangel, potato, combining pea, vining pea, winter and spring field bean, broad bean, swede, turnip, cabbage, Chinese cabbage, kale, cauliflower, Brussels sprout, carrot, parsnip, bulb onion, salad onion, garlic, shallots, lettuce (field), spinach, linseed, leek, strawberry, ornamental bulbs and forestry.

An emulsifiable concentrate containing 100 g/litre (10.5% w/w) cycloxydim

Risk and Safety Information

Danger:
Causes skin irritation.
Causes serious eye irritation.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.
Suspected of damaging the unborn child.
Toxic to aquatic life with long lasting effects.

Avoid breathing vapours.
Wear protective gloves, protective clothing, eye protection and face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Do NOT induce vomiting.
Store locked up.
Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty 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.

UN 3082
Packaging Group III
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains SOLVENT NAPHTHA, NAPHTHALENE)
Marine Pollutant

Supplied by:
BASF Ireland Limited
P.O. Box 4, Earl Road
Cheadle Hulme, CHEADLE
Cheshire SK8 6QG, UK
Tel: 01 825 5701
Fax: 01 825 2038
Emergency Information
(24 hours freephone):
0049 180 227 3112
Technical Enquiries:
0044 (0)845 602 2553 (office hours)

Authorization holder:
BASF plc, P.O. Box 4,
Earl Road, Cheadle Hulme,
CHEADLE
Cheshire, SK8 6QG, UK

© = registered trademark of BASF
**IMPORTANT INFORMATION**

**FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL HERBICIDE**, as directed below:

<table>
<thead>
<tr>
<th>Crops</th>
<th>Maximum Individual Dose</th>
<th>Maximum Number of Treatments</th>
<th>Latest Time of Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter and spring Oilseed Rape</td>
<td>4 litres product/ha</td>
<td>One per year</td>
<td>Two visibly extended internodes (BBCH 32)</td>
</tr>
<tr>
<td>Broad bean, winter and spring Field bean, Combining pea, Potato</td>
<td>4 litres product/ha</td>
<td>One per crop</td>
<td>8 weeks before harvest</td>
</tr>
<tr>
<td>Brussels sprout, Leek, Salad onion, Strawberry, Chinese cabbage, Kale.</td>
<td>4 litres product/ha</td>
<td>One per crop</td>
<td>6 weeks before harvest</td>
</tr>
<tr>
<td>Carrot</td>
<td>4 litres product/ha</td>
<td>One per crop</td>
<td>5 weeks before harvest</td>
</tr>
<tr>
<td>Cabbage, Cauliflower, Vining pea, Bulb onion, Garlic, Shallot, Spinach.</td>
<td>4 litres product/ha</td>
<td>One per crop</td>
<td>4 weeks before harvest</td>
</tr>
<tr>
<td>Lettuce (outdoor)</td>
<td>4 litres product/ha</td>
<td>One per crop</td>
<td>3 weeks before harvest</td>
</tr>
<tr>
<td>Sugar beet, Fodder beet, Swede, Turnip.</td>
<td>4 litres product/ha</td>
<td>One per crop</td>
<td>Until plants meet between rows (BBCH 39)</td>
</tr>
<tr>
<td>Linseed</td>
<td>4 litres product/ha</td>
<td>One per crop</td>
<td>Before inflorescence emergence (BBCH 39)</td>
</tr>
<tr>
<td>Mangel</td>
<td>4 litres product/ha</td>
<td>One per crop</td>
<td>Before crop cover starts (BBCH 19)</td>
</tr>
<tr>
<td>Parsnip</td>
<td>4 litres product/ha</td>
<td>One per year</td>
<td>50% of expected root diameter reached (BBCH 45)</td>
</tr>
<tr>
<td>Forestry</td>
<td>4 litres product/ha</td>
<td>One per year</td>
<td>-</td>
</tr>
<tr>
<td>Ornamental Bulbs</td>
<td>4 litres product/ha</td>
<td>One per year</td>
<td>-</td>
</tr>
</tbody>
</table>

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE.**

**PRECAUTIONS**

KEEP OUT OF THE REACH OF CHILDREN.
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.
AVOID CONTACT WITH SKIN AND EYES.
IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL.
IF SWALLOWED DO NOT INDUCE VOMITING: SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL.

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment.
WEAR SUITABLE PROTECTIVE GLOVES, CLOTHING AND FACE PROTECTION (FACESHIELD) when handling the concentrate.
WEAR SUITABLE PROTECTIVE GLOVES when using handling the spray boom or adjusting nozzles.
WASH CONCENTRATE from skin or eyes immediately.
WASH HANDS AND EXPOSED SKIN before meals and after work.
KEEP LIVESTOCK OUT OF TREATED AREAS until foliage of any poisonous weeds, such as ragwort, have died and become unpalatable.
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**

KEEP IN ORIGINAL CONTAINER, tightly closed in a safe place.
WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank, and dispose of safely.
DO NOT RE-USE CONTAINER.
Keep dry and frostproof in a suitable pesticide store.
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.

Stratos Ultra is a systemic herbicide. It controls most of the annual and perennial grasses in the listed crops as an overall spray. It is rapidly absorbed through the leaves and moves throughout the plant to the growing points. Decay occurs rapidly in the stems and roots. Stratos Ultra acts principally through the foliage and it is, therefore, independent of soil type. It is effective on grasses from the two leaf stage until the second node stage. Stratos Ultra is rainfast one hour after application.

Stratos Ultra should be applied post-weed emergence for control in the crops listed.

1. Restrictions/Warnings

Professional Use Only

For oilseed rape, Stratos Ultra must not be applied to the same soil in two consecutive years.

Fodder beet and mangels must not be grazed by livestock or harvested for animal consumption until at least 56 days following the last application of Stratos Ultra.

1.1 Efficacy

Grass weeds vary in their susceptibility to Stratos Ultra. Identify the species to be controlled and then select the appropriate rate of use.

Apply within the recommended growth stages when weeds are actively growing for best results. Drought, cool conditions, stress or other negative factors can reduce effectiveness by interfering with the uptake and translocation on Stratos Ultra.

Rainfast one hour after application

1.2 Crop safety

Do not apply to crops suffering from stress, which may be caused for example by pests, disease, water logging, poor seedbed conditions or previous chemical treatment.

1.3 Spray drift

Avoid drift onto nearby crops, especially graminaceous crops which can be sensitive to applications of Stratos Ultra

1.4 Other restrictions / warnings

Stratos Ultra when applied up to 4.0 l/ha shows no negative effects on the processing of cauliflower, carrots, parsnips, oilseed rape and sugar beet. For all other crops consult processor before using on crops for processing.
2. Weed control

2.1 Susceptibility of weeds to Stratos Ultra

Susceptibility of Grass Weeds to Single Applications of Stratos Ultra

<table>
<thead>
<tr>
<th>WEED</th>
<th>RATES OF APPLICATION L/ha</th>
<th>TIMING OF APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wild Oats, Rye, Perennial Ryegrass, Italian Ryegrass and Loose Silky</td>
<td>1.5 L/ha</td>
<td>2 leaf to second node</td>
</tr>
<tr>
<td>Bent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barley</td>
<td>2.0 L/ha</td>
<td>2 leaf to end of tillering</td>
</tr>
<tr>
<td>Wheat, Durum Wheat, Triticale, Maize, Oats (cultivated), Smooth</td>
<td>2.0 L/ha</td>
<td>Late tillering to second node</td>
</tr>
<tr>
<td>Stalked Meadow grass, Field brome, Sterile Brome, Black grass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Bent</td>
<td>3.0 L/ha</td>
<td>2 leaf to second node</td>
</tr>
<tr>
<td>Scutch, Downy brome</td>
<td>4.0 L/ha</td>
<td>10-15 cm (4-6 inches) high, usually corresponding to the 3-9 fully expanded leaf stage</td>
</tr>
<tr>
<td>Scutch (low levels of infestation where suppression is required)</td>
<td>3.0 L/ha</td>
<td>10-15 cms (4-6 inches) high, usually corresponding to the 3-9 fully expanded leaf stage</td>
</tr>
</tbody>
</table>

Do not make applications to grasses under stress, such as stress due to lack of moisture, herbicide injury, mechanical injury, cold temperatures or poor soil fertility since unsatisfactory control will probably result.

Common Scutch and Other Perennials - Sufficient foliage should have emerged to absorb the spray. Shoots not emerged or just emerging at application will not be controlled. Do not cultivate for at least 14 days after spraying to allow Laser to translocate to the underground rhizomes. Leave a longer interval (up to 21 days) if growing conditions are poor.

Established Common Scutch - To improve control a thorough pre planting cultivation to a depth of 10 cm is recommended to fragment the rhizomes and encourage uniform emergence.

2.2 Resistance management

Herbicide Resistance to products containing the same modes of action as Stratos Ultra, especially ACCase-inhibitors (HRAC-class A), have been occasionally identified in Europe. Repeated application of herbicides within the same growing period or over several years in the same field should consider the use of products with different modes of action. Otherwise, selection of resistant biotypes can take place, which can propagate and may become dominating. Development of resistance can be avoided or delayed by alternating (or tank mixing) herbicide applications with suitable products having different modes of action.
3. Crop specific information

3.1 Crops

3.1.1 Winter and Spring Oilseed Rape:

Stratos Ultra may be applied from when the crop has fully expanded cotyledons until before the crop canopy prevents adequate spray penetration.

Stratos Ultra must not be applied to oilseed rape crops on the same soil in two consecutive years.

3.1.2 Sugar Beet, Fodder Beet and Mangels:

Stratos Ultra can be applied from the two true leaf stage of the crop until before the crop canopy prevents adequate spray penetration.

Fodder beet and mangels must not be grazed by livestock or harvested for animal consumption until at least 56 days following the last application of Stratos Ultra.

3.1.3 Potatoes:

Stratos Ultra may be applied at any crop stage before the crop canopy prevents adequate spray penetration.

3.1.4 Peas:

Stratos Ultra may be applied to all varieties of combine and vining peas.

Apply from the third node stage of the crop until before the crop canopy prevents adequate spray penetration.

A satisfactory crystal violet wax test should be carried out if leaf wax may have been affected by unfavourable growing or weather conditions. Other post emergence crop protection products will also affect wax levels and a wax test may be necessary. Ideally, Stratos Ultra should follow applications of broad leaf herbicides, but where Stratos Ultra is applied before other products (i.e. because grass weeds are the major problem) it is essential to conduct a satisfactory crystal violet wax test before applying the next treatment.

3.1.5 Winter and Spring Field Beans and Broad Beans:

Stratos Ultra may be applied from the two leaf pairs stage of field beans and the three leaf pair stage of broad beans until before the crop canopy prevents adequate spray penetration.

3.1.6 Swede, Turnip, Cabbage, Cauliflower, Brussels Sprouts, Chinese cabbage, Kale:

Stratos Ultra may be applied from the three expanded leaf stage until before the crop canopy prevents adequate spray penetration.
3.1.7 Linseed:
Stratos Ultra may be applied from when the crop is 2.5 cm tall until before the crop canopy prevents adequate spray penetration.

3.1.8 Carrots and Parsnips:
Stratos Ultra may be applied from the two leaf stage of the crop until before the crop canopy prevents adequate spray penetration.

3.1.9 Bulb Onions, Salad Onions, Shallots, Garlic and Leeks:
Stratos Ultra may be applied from when the crop has two true leaves for leek and from when the crop has five true leaves for the other crops up until before the crop canopy prevents adequate spray penetration. When used in sequence with post-emergence products, ensure that leaf wax levels are adequate to afford protection for application of each product.

3.1.10 Strawberries:
Stratos Ultra may be applied from when the crop has four true leaves until before the crop canopy prevents adequate spray penetration.
If temperatures are likely to exceed 20°C at or after spraying, delay application until the cool of the evening.

3.1.11 Ornamental bulbs:
Stratos Ultra may be applied when the crop is 5-10 cm tall. It has been used on tulips, narcissi, hyacinths and irises. However, certain species and varieties may be more sensitive to chemical treatment than others and growers are therefore advised to first spray a small proportion of the plants to check their tolerance before treating the rest of the crop.

3.1.12 Forestry
Stratos Ultra may be applied to Ash, Beech, Oak, Poplar, Sycamore and Willow at any time after transplanting once plants are established.

3.1.13 Outdoor Lettuce and Spinach
For spinach, Stratos Ultra may be applied from the two leaf stage of the crop until the crop has nine true leaves.

For outdoor lettuce, Stratos Ultra may be applied from the two leaf stage of the crop and before the crop canopy prevents adequate spray penetration.

For both outdoor lettuce and spinach certain varieties/cultivars may be more sensitive to chemical treatment than others and growers are therefore advised to first spray a small proportion of the plants to check their tolerance before treating the rest of the crop.
3.2 Rate of application

The standard volume is 220 litres/hectare but 100 litres/hectare may be used in open crops for control of annual weeds which are easily accessible to the spray (i.e. at rates of Stratos Ultra up to 2.0 litres/hectare only). **DO NOT** use the 100 litre spray volume for control of perennial grasses or when applying in tank mixtures. Use 330 litres/hectare if either of the following conditions apply:
- Dense weed growth or crop cover
- When spraying ridged crops with a prevailing side drift

4. Following crops

All crops can be sown following a normal harvest of the treated crop. In case of crop failure, all dicotyledonous crops can be planted without any time interval. Replanting of graminaceous crops including maize requires a time interval of four weeks.

5. Mixing and application

5.1 Mixing

Never prepare more spray solution than is required.

Three quarters fill the tank with clean water and start the agitation. To ensure thorough mixing of the product, invert the container several times before opening. Add the required quantity of Stratos Ultra to the spray tank while re-circulating. Add the remainder of the water and continue agitation until spraying is complete.

When tank mixes are to be used, take due note of any instructions given as to the order of mixing. Each product should be added separately to the spray tank and fully dispersed before the addition of any further product(s).

This product may only be used in a tank mix or in sequence with other products when these uses comply with the label recommendations of every product in the tank mix/sequence.

All tank mixes should be used immediately after mixing.

On emptying the container, rinse container thoroughly by using an integrated pressure rinsing device or by manually rinsing three times. Add washings to tank at time of filling and dispose of container safely.

5.2 Application

Apply as a **FINE** spray, as defined by BCPC, unless the highest water volumes are used when **FINE** and **MEDIUM** sprays are permissible.
5.3 Sprayer cleaning
Wash sprayer thoroughly immediately after use, using clean water and following the sprayer cleaning guidance provided by the equipment manufacturer.

6. Sequential Treatments
Sequence of Stratos Ultra with other products may follow pre emergence treatments to any crop, provided that the crop is undamaged. When used in sequence with other post emergence products:
- allow at least 7 days between applications
- allow 14 days if Basagran is used
- check the Basagran label for specific restrictions

7. Tank Mixtures
For details of compatibilities contact your distributor, local BASF representative or the BASF Technical Services Hotline: 0044 845 602 2553.

Mixtures Known to be Incompatible
- Stratos Ultra + MBC fungicides (carbendazim)
- Stratos Ultra + phenmedipham

This list has been prepared in the light of information available at the time of publication. Other mixtures not referred to here may also prove to be incompatible. If unsure about compatibility contact your distributor or local BASF representative.

8. Trademark acknowledgements
Stratos Ultra is a registered trademark of BASF.
The following does not form part of the product label under S.I. No. 159 of 2012:-

With many products there is a general risk of resistance developing to the active ingredients. For this reason a change in activity cannot be ruled out. It is generally impossible to predict with certainty how resistance may develop because there are so many crop and use connected ways of influencing this. We therefore have to exclude liability for damage or loss attributable to any such resistance that may develop. To help minimise any loss in activity the BASF recommended rate should in all events be adhered to.

Numerous, particularly regional or regionally attributable, factors can influence the activity of the product. Examples include weather and soil conditions, crop plant varieties, crop rotation, treatment times, application amounts, admixture with other products, appearance of organisms resistant to active ingredients and spraying techniques. Under particular conditions a change in activity or damage to plants cannot be ruled out. The manufacturer or supplier is therefore unable to accept any liability in such circumstances. All goods supplied by us are of high grade and we believe them to be suitable, but as we cannot exercise control over their mixing or use or the weather conditions during and after application, which may affect the performance of the material, 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 for any damage or injury whatsoever arising from their storage, handling, application or use; but nothing should be deemed to exclude or restrict any liability upon us which cannot be excluded or restricted under the provisions of the Unfair Contract Terms Act 1977 or any similar applicable law.
The information on this label is based on the best available information including data from test results

Safety Data Sheet

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

http://www.agricentre.basf.ie/go/stratos_ultra_sds

Alternatively, contact your supplier.