Thor

A soluble granule formulation containing 500 g/kg tribenuron methyl, a sulfonylurea.

**A herbicide for broad-leaved weed control in wheat, oats, barley, durum wheat, triticale, winter rye and green cover on land not being used for crop production.**

**PRODUCT BENEFITS**

- Wide spectrum of broad-leaved weeds controlled.
- Long window of application in cereals including autumn use.
- Broad range of crop recommendations.
- Low volume of application for easy mixing, storage and packaging disposal.
- A flexible tank-mixer.
- A range of sequences with sulfonylureas.

**LERAP category:** Unclassified

**Pack size:** 120 g
IMPORTANT INFORMATION
FOR USE ONLY AS AN AGRICULTURAL HERBICIDE.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Maximum individual dose</th>
<th>Maximum number of treatments</th>
<th>Latest time of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat, barley, oats, rye (winter), triticale, durum wheat and green cover on land not being used for crop production</td>
<td>30 g/ha</td>
<td>One per crop</td>
<td>GS 39</td>
</tr>
</tbody>
</table>

Other specific restrictions:
• This product must not be applied at rates greater than 10g product/ha before the end of February in the year of harvest.

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. MAPP 15239

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

• THOR should 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.

• DO NOT use THOR on cereal crops undersown with grasses, clover or other legumes or any other broad-leaved crop.

• Due to the high level of activity of the herbicide, special care must be taken to avoid damage by drift onto broad-leaved plants outside the target area, or onto ponds, waterways or ditches. Thorough cleansing of equipment is also very important – see below.

• Contract agents should be consulted before using on crops grown for seed.

• THOR should not be applied within seven days of rolling the crop.

• DO NOT apply THOR more than once to any cereal crop.

• All requirements or restrictions on other product labels must be adhered to when applied to the same crop as THOR. Contact your distributor for further information.

• Refer to ‘Compatibility’ for details on use of THOR with other ‘ALS inhibiting’ herbicides.

WEEDS CONTROLLED

THOR contains tribenuron methyl, a sulfonylurea herbicide, which works mainly by contact action and is most effective if applied when the weeds are small and actively growing. Good spray cover of the weeds must be obtained for best results. Susceptible plants cease growth almost immediately after application and symptoms can be seen about two weeks after application. Weed control may be reduced when soil conditions are very dry. The susceptibility rating of weeds in the following table refer to good spray cover and good growing conditions.

<table>
<thead>
<tr>
<th>Weed</th>
<th>Plants up to two expanded true leaves</th>
<th>Plants up to six expanded true leaves</th>
<th>Plants up to 15 cm across/high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlock*</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>Chickweed, common</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>Deadnettle, red*</td>
<td>S</td>
<td>S</td>
<td>MR</td>
</tr>
<tr>
<td>Fat hen</td>
<td>S</td>
<td>MS</td>
<td>MS</td>
</tr>
<tr>
<td>Forget-me-not*</td>
<td>S</td>
<td>S</td>
<td>MS</td>
</tr>
<tr>
<td>Fumitory*</td>
<td>S</td>
<td>S</td>
<td>R</td>
</tr>
<tr>
<td>Hemp-nettle, common</td>
<td>S</td>
<td>S</td>
<td>–</td>
</tr>
<tr>
<td>Mayweed*</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>Poppy, common*</td>
<td>S</td>
<td>S</td>
<td>R</td>
</tr>
<tr>
<td>Redshank</td>
<td>S</td>
<td>S</td>
<td>MS</td>
</tr>
<tr>
<td>Shepherd’s purse*</td>
<td>S</td>
<td>S</td>
<td>MS</td>
</tr>
</tbody>
</table>

S = Susceptible     MS = Moderately Susceptible    MR = Moderately Resistant    R = Resistant
* Controlled by autumn or spring application up to six true leaves.

In addition to the above weeds, volunteer beans and oilseed rape will controlled by a dose of 10 g/ha.
**Weed resistance**

This product contains tribenuron-methyl, which is an ALS inhibitor, also classified by the Herbicide Resistance Action Committee as ‘Group B’.

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 a 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.

A strategy for preventing and managing resistance should be adopted. The Weed Resistance Action Group has produced guidelines and copies are available from the HGCA, CPA, your distributor, crop advisor or product manufacturer.

**CROPS**

**Cereals**

THOR can be used post-emergence on all varieties of wheat, barley, oats, winter rye, durum wheat, triticale and land not being used for crop production at the growth stages given below.

**Green cover on land not being used for crop production**

THOR can be used for broad-leaved weed control on land not being used for crop production. Only cereals may be sown in the same calendar year to set-aside land treated with THOR.

**Dose**

Apply THOR at 30 g/ha.

When THOR is applied before the end of February in the year of harvest then no more than 10g/ha can be applied.

**Timing**

THOR may be applied from the three-leaf stage (GS 13) up to and including the flag leaf fully emerged stage of growth (GS 39).

**Following crops**

Only cereals, oilseed rape, field beans or grass may be sown in the same calendar year as harvest of a cereal crop treated with THOR. In case of crop failure for any reason, sow only cereals within three months of application of THOR. Before sowing, soil should be ploughed and cultivated to a depth of at least 15 cm.

**VOLUME AND APPLICATION**

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

Application should be made in 100–200 litres of water per hectare, using suitable ground equipment to give good spray cover of the weeds. Use a conventional field sprayer at a pressure of two–three bars and apply as a MEDIUM spray quality (as defined by BCPC).

When crops are thick or weed growth is dense, use 400 litres of water per hectare. Care should be taken not to overlap spray swaths.

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

**MIXING**

Quarter fill the spray tank with clean water, start the agitation and add the required quantity of THOR directly to the tank without prior creaming. Continue agitation while topping up the tank and while spraying.
COMPATIBILITY

To widen the spectrum of activity and improve the control of some weeds, THOR may be applied with other herbicides, provided each product can be applied within the label recommendations for its use. Always add THOR to the spray tank first when using in tank-mix and ensure it is fully dispersed before adding the partner product.

The following ‘joint application’ with other sulfonylurea and ‘ALS inhibiting’ herbicides may be applied to a crop. Requirements and restrictions on other product labels must be adhered to. ‘Joint application’ is the use of THOR in tank mixture or sequence with one of the products listed below.

<table>
<thead>
<tr>
<th>Absolute</th>
<th>GF-184</th>
<th>Pacifica</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantis WG</td>
<td>Hiker</td>
<td>Pursuit*</td>
</tr>
<tr>
<td>Barton WG</td>
<td>Hunter</td>
<td>Starane Gold</td>
</tr>
<tr>
<td>Boxer</td>
<td>Lexus Class</td>
<td>Starane Vantage</td>
</tr>
<tr>
<td>Bullion</td>
<td>Lexus Millennium</td>
<td>Starane XL</td>
</tr>
<tr>
<td>Eagle*</td>
<td>Lexus SX</td>
<td></td>
</tr>
<tr>
<td>Galaxy</td>
<td>Othello</td>
<td></td>
</tr>
</tbody>
</table>

* only cereals as following crop

Additional recommendations may be approved since label printing. Please consult your distributor for latest details on compatibilities.

SPRAY TANK CLEAN-OUT

POOR CLEANOUT PRACTICES AND INSUFFICIENT WATER VOLUMES USED FOR THE RINSE PROCEDURE MAY RESULT IN INADEQUATE REMOVAL OF PRODUCT DEPOSITS. SUBSEQUENT USE OF APPLICATION EQUIPMENT IN THESE CIRCUMSTANCES MAY RESULT IN DAMAGE TO NON-CEREAL CROPS.

TO AVOID SUBSEQUENT DAMAGE TO CROPS OTHER THAN CEREALS, IMMEDIATELY AFTER SPRAYING THOR THOROUGHLY CLEAN ALL SPRAY EQUIPMENT, INCLUDING INSIDE AND OUTSIDE OF LID, USING THE FOLLOWING PROCEDURE:

Always start with a clean tank and spray system. Clean spray equipment thoroughly immediately after use.

1. Thoroughly and completely rinse all interior tank surfaces (including lid) with water (use at least 10% of the tank capacity), taking care to remove any visible deposits. Flush pump, filters and boom after removing in-line strainers, nozzle tips and screens (clean these parts separately). Drain the remainder of the rinsate from the tank.

2. Repeat the rinse, flush and drain.

3. Dispose of washings safely. Do not spray onto sensitive crop or land intended for cropping with sensitive crop.

NOTE:
Consult label tank cleanup procedures for all tank mix partners and be sure to use the most rigorous procedure recommended.

WARNING

EXTREME CARE SHOULD BE TAKEN TO AVOID DAMAGE BY DRIFT OF SPRAY ONTO BROAD-LEAVED PLANTS OUTSIDE THE TARGET AREA OR ONTO PONDS, WATERWAYS OR DITCHES. SPRAYING EQUIPMENT SHOULD NOT BE DRAINED OR FLUSHED ONTO LAND PLANTED WITH OR INTENDED FOR PLANTING WITH TREES OR CROPS OTHER THAN CEREALS.

All manufacturers trademarks are acknowledged.
THOR
Contains 500 g/kg tribenuron methyl, a sulfonylurea.

IRRITANT

MAY CAUSE SENSITISATION BY SKIN CONTACT.
VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
KEEP OUT OF REACH OF CHILDREN.
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDSTUFFS.
AVOID CONTACT WITH SKIN.

DANGEROUS FOR THE ENVIRONMENT

WEAR SUITABLE GLOVES.
IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL.
USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION.
THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY.
Contains tribenuron methyl, may produce an allergic reaction.

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

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 CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the product.
However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
WHEN USING DO NOT EAT, DRINK OR SMOKE.
WASH CONCENTRATE from skin or eyes immediately.
WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

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.

Storage and disposal
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDSTUFFS.
KEEP OUT OF REACH OF CHILDREN.
WASH OUT CONTAINER THOROUGHLY and dispose of safely.
KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.