Thrust

A soluble concentrate containing 344 g/l 2,4-D and 120 g/l dicamba as the dimethylamine salt.

For the selective control of annual and perennial broad-leaved weeds in established agricultural grassland and amenity grassland.

**PRODUCT BENEFITS**

- Unique combination of active ingredients to maximise control of Ragwort.
- Specific label recommendation with Nufarm Cropafoil to further improve control of Ragwort.
- Control of other important perennial weeds in grassland.
- Amenity grassland recommendation.

**LERAP category:** Unclassified

**Pack size:** 5 litres

**Storage:** PROTECT FROM FROST
**IMPORTANT INFORMATION**

FOR USE ONLY AS AN AGRICULTURAL/AMENITY HERBICIDE.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Maximum individual dose</th>
<th>Maximum total dose</th>
<th>Latest time of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grassland</td>
<td>3.5 l/ha</td>
<td>3.5 l/ha</td>
<td>Before the crop is 25 cm high</td>
</tr>
<tr>
<td>Amenity grassland</td>
<td>7.0 l/ha</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other specific restriction**

- Livestock must be kept out of treated areas for at least two weeks following treatment and until poisonous weeds such as Ragwort have died and become unpalatable.

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 15408

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**
- DO NOT graze grass for at least 14 days after spraying.
- DO NOT mow or roll four days before or after application. The first four mowings after treatment must be composted for at least six months before use.
- DO NOT treat newly established grass less than one year old.
- DO NOT treat grass crops intended for seed production.
- DO NOT treat grass suffering from drought, disease or other adverse factors.
- DO NOT roll or harrow crops for seven days either before or after application of THRUST.

Avoid spray drift onto neighbouring crops and all broad-leaved plants outside the target area. Do not spray in windy weather. Beets, all brassicas (including oilseed rape, swedes and turnip) lettuce, sunflowers, onions, peas, potatoes, tomatoes, cucumbers, all fruit crops (including vines) and ornamentals are particularly susceptible and may be damaged by spray drift.

Avoid spraying within five metres of the field boundary to reduce effects on non-target insects or other arthropods.

**WEEDS CONTROLLED**

Apply when the majority of annual weeds are at the seedling stage.

**Susceptible**

<table>
<thead>
<tr>
<th>Thistle, creeping (plants up to 50 cm high)</th>
</tr>
</thead>
</table>

**Moderately susceptible**

<table>
<thead>
<tr>
<th>Buttercup, creeping</th>
<th>Dock, broad-leaved</th>
<th>Dock, curled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ragwort, common</td>
<td>Consistently high levels of control obtained under good growing conditions.</td>
<td>Top growth usually killed and a useful measure of long-term control obtained under good growing conditions.</td>
</tr>
</tbody>
</table>

**Ragwort control**

Spray when the majority of plants are in the rosette stage and growing vigorously in the autumn or spring but before the flower spines start to grow. Fields for hay or silage the following spring should be sprayed in the preceding autumn. Fields to be grazed should be treated in the spring. Common ragwort will require spraying over a minimum of two years for complete control.

**TANK MIX**

THRUSt + Nufarm Cropoil (ADJ 0447).

Improvement in the level of control of Common ragwort to susceptible can be achieved by mixing 3.5 l/ha THRUST with 1.0% Nufarm Cropoil.
**CROP SPECIFIC INFORMATION**

**Crop**

**Grassland**

*Maximum dose rate*
3.5 l/ha.

*Maximum total dose*
3.5 l/ha.

*Timing*
April to September

*Water volume*
100–400 litres of water per hectare. For use in knapsack sprayer the minimum water volume is 200 litres per hectare.

**Amenity grassland**

*Maximum dose rate*
3.5 l/ha

*Maximum total dose*
7.0 l/ha

*Timing*
April to September

*Interval between applications*
Six weeks.

*Water volume*
100–400 litres of water per hectare. For use in knapsack sprayer the minimum water volume is 200 litres of water per hectare.

**MIXING AND SPRAYING**

Before use ensure that the spraying equipment has been thoroughly cleaned. Half-fill the spray tank with clean water. With the contents of the spray tank under re-circulation, add the measured quantities of THRUST through the filter. Top up the tank with water to the required level and maintain re-circulation until the tank is sprayed out.

Apply the recommended quantity of THRUST through a conventional hydraulic sprayer using a MEDIUM spray to cover the weed leaves evenly and thoroughly.

After each day’s use wash out with water and wetting agent. Wash out again with water, drain and allow to dry. Traces of herbicide left in the sprayer may damage susceptible crops if these are subsequently sprayed using the same equipment.

Avoid spray drift onto neighbouring crops and all broad-leaved plants outside the target area. Do not spray in windy weather. Beets, all brassicas including oilseed rape, lettuce, peas, potatoes, tomatoes, all fruit crops and ornamentals are particularly susceptible to 2,4-D and may be damaged by spray drift.

**Knapsack application**

This method is recommended for spot treatment of weeds, e.g. clumps of Nettles, Common ragwort, Docks or other weeds. Apply as a MEDIUM spray to just before run-off occurs.
WEATHER AND GROWING CONDITIONS

Apply to a dry crop when rain is not forecast for at least 12 hours. Optimum results are obtained when the weeds are actively growing under good soil and weather conditions. Reduced weed control may be obtained during drought or cold weather. If rain falls shortly after application the effect of THRUST may be reduced.

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 the HGCA, CPA, your distributor, crop adviser or Nufarm UK.

<table>
<thead>
<tr>
<th>Size of knapsack</th>
<th>THRUST</th>
<th>Water volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 litres</td>
<td>45 ml</td>
<td>5.0 litres</td>
</tr>
<tr>
<td>10 litres</td>
<td>90 ml</td>
<td>10.0 litres</td>
</tr>
<tr>
<td>20 litres</td>
<td>180 ml</td>
<td>20.0 litres</td>
</tr>
</tbody>
</table>
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), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces or applying by hand-held equipment.

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

WHEN USING DO NOT EAT, DRINK OR SMOKE.

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

Environmental protection
KEEP LIVESTOCK out of treated areas for at least two weeks following treatment until foliage of any poisonous weeds, such as Ragwort, have died and become unpalatable.

TOXIC TO AQUATIC ORGANISMS, may cause long term adverse effects in the aquatic environment.

DANGER
Harmful if swallowed.
Causes serious eye damage.
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.

IF ON SKIN: Wash with plenty of soap and water.

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

Immediately call a POISON CENTRE or doctor/physician.

Avoid release to the environment.

Dispose of contents/container to a licensed 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.
DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container. To avoid risks to man and the environment, comply with instructions for use. RISK TO NON-TARGET INSECTS OR OTHER ARTHROPODS. See Directions for use. Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.

**Storage and disposal**
KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDSTUFFS.
WASH OUT CONTAINER THOROUGHLY and dispose of safely.
KEEP OUT OF REACH OF CHILDREN.
This material and its container must be disposed of in a safe way.
DO NOT RE-USE CONTAINER for any purpose.