



MAPP 19542

An emulsifiable concentrate containing 200 g/l (20.4% w/w) fluroxypyr (acid equivalent) present as 288 g/L of the 1-methyl heptyl ester, and aromatic naphtha.

HOIST is a post-emergence herbicide for the control of a range of annual and perennial weeds in winter and spring cereals, forage maize and grassland.

Net Contents: 1 to 5 Litres **e**

Authorization Holder & Marketing Company: Agform Limited
Maidenstone Heath
Blundell Lane
Southampton
SO31 1AA
UK

Tel: +44 2382 122379

Product identifier according to Art. 18 of Reg.(EC) No 1272/2008 [CLP]:
fluroxypyr-meptyl, aromatic hydrocarbon solvent & organic sulphonate surfactants.



Danger

FLAMMABLE LIQUID AND VAPOUR.
MAY BE FATAL IF SWALLOWED AND IRRITATES AIRWAYS.
CAUSES SKIN IRRITATION.
MAY CAUSE AN ALLERGIC SKIN REACTION.
CAUSES SERIOUS EYE DAMAGE.
MAY CAUSE DROWSINESS OR DIZZINESS.
VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.



Keep away from heat/sparks/open flames/ hot surfaces – No smoking.

Avoid breathing vapours or spray.

Wash hands thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves/protective clothing/ eye protection.

IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Call a POISON CENTER or doctor/physician if you feel unwell.

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/ attention.

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

Take off contaminated clothing and wash before reuse.

Collect spillage.

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.

To avoid risks to human health and the environment, comply with the instructions for use

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

Crop	Maximum individual dose (litres product/ha)	Maximum Total dose	Maximum number of treatments	Latest time of application
Wheat (winter), barley (winter)	1	-	1 per crop	Before GS 39 (flag leaf sheath extending stage)
Durum wheat, oats (winter), rye, triticale,	1	-	1 per crop	Before GS 31 (second node detectable stage)
Barley (spring), wheat (spring)	0.75	-	1 per crop	Before GS 39 (flag leaf sheath extending stage)
Oats (spring)	0.75	-	1 per crop	Before GS 31 (second node detectable stage)
Forage maize	1	-	1 per crop	Before GS 17 (seven leaves unfolded stage)
Grassland	0.75	-	1 per annum (see 'other specific restrictions')	-

Other Specific Restrictions:

1. A maximum total dose of 0.75 litres per hectare must be observed for applications made to cereals between crop emergence in the year of planting and 1st February in the year of harvest.
- 2 Non-returnable containers must not be re-used for any purpose.
3. Livestock must be kept out of treated areas for at least 3 days following treatment. IF RAGWORT IS PRESENT, FOLLOW THE GUIDANCE IN THE 'DIRECTIONS FOR USE'

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.

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 applying by hand-held equipment.

AVOID CONTACT WITH SKIN.

IN CASE OF CONTACT WITH EYES, rinse immediately with plenty of water and seek medical advice.

WASH CONCENTRATE from skin or eyes immediately.

WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

DO NOT BREATHE SPRAY.

WHEN USING DO NOT EAT DRINK OR SMOKE.

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

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

Environmental Protection

DO NOT CONTAMINATE WATER with product or its container. Do not clean application equipment near surface water. Avoid contamination from farmyards and roads.

Livestock must be kept out of treated areas for at least 3 days following treatment. IF RAGWORT IS PRESENT, FOLLOW THE GUIDANCE IN THE 'DIRECTIONS FOR USE'.

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 M of the top of the bank of a static or flowing water body, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 M of the top of a ditch which is dry at the time of application. DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1 M of the top of the bank of a static or flowing water body. Aim spray away from water.

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 CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

Storage and Disposal

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 for any purpose.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

KEEP OUT OF REACH OF CHILDREN.

USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION.

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.

HOIST is a selective post-emergence herbicide for the control of a range of annual and perennial weeds in cereals, forage maize and newly-sown grass leys.

Crop Failure

In the event of a cereal crop failure the following crops can be sown: Spring cereals, spring oilseed rape, maize, onion, cultivated poppies and new leys. A minimum interval of 5 weeks is required and there are no cultivation restrictions.

Rotational Crops

All crops can be sown following an application of HOIST.

For best results apply HOIST when weeds are actively growing. In newly-sown crops, seedlings and small weeds are more susceptible to HOIST and will respond quicker when treated at this stage. Vigorous crop competition enhances control of the more resistance weeds and prevents weeds which germinate after application from becoming a problem in the crop.

RESTRICTIONS

Where ragwort is present users should consult the Code of Practice on How to Prevent the Spread of Ragwort. Ragwort plants sprayed with this herbicide are more palatable with higher levels of toxins. Animals should be excluded from treated areas until any ragwort has completely recovered or died and there is no visual sign of the dead weed. Do not include treated ragwort in hay or silage crops.

Do not spray HOIST to crops undersown with clover or other legume-containing mixtures.

Do not treat crops that are or have been under stress from any cause, including poor soil or cultural conditions, adverse climatic conditions, waterlogging or drought, pest or disease attack, nutrient deficiency, or any other cause.

For optimum results, apply HOIST when the weeds are small and actively growing. The crop should be growing strongly to provide good competition with the weeds. This is particularly important with cleavers especially where HBN's are not included in the tank-mix.

HBN's are products containing ioxynil and/or bromoxynil (refer to Compatibility section).

Crops which are undersown with grass may be sprayed provided the grasses are tillering.

Avoid spray drift onto other crops or areas.

Do not spray if night temperatures are low or if frost is imminent.

Do not roll or harrow 7 days before or after application.

Do not spray in windy weather and avoid drift onto non-target crops/areas.

Apply to dry foliage, when rain is not imminent.

Wash equipment thoroughly with water and detergent immediately after use. Traces of HOIST can cause harm to susceptible crops sprayed later.

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

HOIST will not control weeds that emerge after application.

ONLY one application of HOIST may be made per crop or year (see statutory conditions of approval).

When the product is applied as a spot treatment to newly sown grass leys the maximum concentration must not exceed 30 ml product per 10 litres water. A maximum total dose of 0.75 litres per hectare must be observed for applications made to cereals between crop emergence in the year of planting and 1st February in the year of harvest.

RESISTANCE WARNING: Strains of weeds resistant to herbicides may develop, in which case reduced levels of control may be seen. It is recommended that HOIST is used as part of a cropping program which includes the use of herbicides with different modes of action. Do not rely on one herbicide mode of action in the same field over several years.

CROP SPECIFIC INFORMATION

A. OVERALL APPLICATION

(Newly Sown Leys)

Do not treat crops where clover or other legumes are an important part of the sward.

Newly-sown grass leys (Autumn and Spring application):

HOIST is applied at 0.75 litres/ha on newly sown grass leys (in 200-400 litres water/ha). Always use the higher volume of water recommended when the grass growth is thick, or weeds are at the maximum recommended growth stage for treatment. Always use a water volume that will ensure good spray coverage of the weeds.

HOIST is recommended for the control of Common Chickweed in newly-sown grass leys. The grass must have at least 3 fully expanded leaves at the time of treatment.

Common Chickweed will be controlled at up to 5 cm.

Apply 0.75 litres per hectare of HOIST in 200-400 litres of water per hectare. Apply in the autumn or spring when the weeds are actively growing. Do not apply more than a total maximum dose of 0.75 litres of HOIST per hectare per year.

B. SPOT APPLICATION

(Grassland including newly sown leys)

Where weed populations are too low to justify overall spraying, HOIST may be applied as a spot treatment to established grassland and newly sown grass leys, using a spray concentration of 30 ml HOIST in 10 litres of water.

Spray to evenly wet the foliage, to just before the point of run-off.

Keep livestock out of treated areas until the foliage of any poisonous weeds such as Ragwort has died and become unpalatable; under certain conditions, this may take several weeks. The grazing / cutting management regime must be planned in advance to allow sufficient time for this to occur.

Weed species	Timing and notes
Curled dock Broad-leaved dock	After cutting or grazing, ensure that sufficient weed foliage is present and that the docks are actively growing before spraying. Delay spraying for 2-3 weeks after cutting or grazing. Apply in spring when the docks are at the rosette stage, and between 15-20 cm. Additional treatment in the spring of the following year may be required where dock populations are dense or well established.
Dandelion	Apply in the spring when actively growing, but prior to flowering
Common nettle	For a reduction in top growth, apply in the spring when growing actively, but prior to flowering (normally up to mid June)
Bramble, broom	Spray when the plant is actively growing in June-August but before growth begins to slow in the autumn. Incomplete eradication may result if the foliage is inadequately wetted.

Forage Maize

HOIST is recommended for the control of Black Nightshade from cotyledons up to 6 leaves stage. HOIST will not control Black Nightshade which has not emerged at the time of application.

The maize must be between the 3-6 leaf stage and must not be over 20 cm in height.

Do not apply HOIST if the side roots have started to develop on the first node.

Apply 1.0 litre per hectare of HOIST in 200-300 litres of water per hectare. Do not apply more than a total maximum dose of 1.0 litre of HOIST per hectare per year.

Do not apply HOIST in a tank-mix with any other product or if the crop is beyond the recommended growth stage.

Boom overlap must be avoided.

Cereals

A. Spring Application to Winter and Spring Cereals

HOIST may be applied in the Spring according to the Crops, Timing and Rates listed in the table below.

Crop	Timing of Application	Rate L/ha	Weeds Controlled & Maximum Growth Stage for Control
Winter wheat Winter barley	Apply from the 2 leaf stage (GS 12) until before flag leaf sheath opening stage (GS 39)	1.0	Cleavers (flowering) Common chickweed (flowering) Common hemp-nettle (flowering)
Winter oats Winter rye Durum wheat Triticale	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	1.0	Field forget-me-not (flowering) Black bindweed (6 leaves) Henbit dead nettle (4 leaves) Red dead-nettle (4 leaves) Knotgrass (2 leaves) Common fumitory (2 leaves) Groundsel (checked at 2 leaves) Mayweeds (checked at 2 leaves) Redshank (checked at 2 leaves) Common field-speedwell (checked at 2 leaves) Ivy-leaved speedwell (checked at 2 leaves) Pale persicaria (checked at 2 leaves)
Spring wheat Spring barley	Apply from the 2 leaf stage (GS 12) up to and including the flag leaf ligule just visible stage (GS 39)	1.0	Cleavers (10 cm) Common chickweed (10 cm) Common hemp-nettle (10 cm) Field forget-me-not (5 cm) Black bindweed (4 leaves) Knotgrass (2 leaves) Common fumitory (2 leaves)
Spring oats	Apply from the 2 leaf stage (GS 12) until before second node detectable stage (GS 31).	1.0	Corn spurrey (2 leaves) Groundsel (checked at 2 leaves) Mayweeds (checked at 2 leaves) Redshank (checked at 2 leaves) Common field-speedwell (checked at 2 leaves) Ivy-leaved speedwell (checked at 2 leaves) Pale persicaria (checked at 2 leaves)

Cereal crops undersown with grass may be treated if the grass has reached the tillering stage. Do not treat crops undersown with clover or other legumes.

The recommended spray volume is 200-400 litres of water per hectare. Only use low rate on small weeds in very open crops. Increase the volume to 400 litres of water per hectare in thick crops and where weed cover is thick.

Application to winter oats should be delayed until risk of frost is over.

B. Spring Application in Tank-Mix with HBNS*

HOIST can be tank-mixed with HBNS for use in crops of winter and spring cereals in the Spring according to the Crops, Timing and Rates listed in the tables below.

Do not spray if frost is imminent. Application to winter oats should be delayed until risk of frost is over.

LOW RATE MIXTURE

(Recommended where cleavers, chickweed, hemp-nettle and forget-me-not are relatively small; see maximum growth stages below).

Crop	Timing of Application	Rate L/ha	Weeds Controlled & Maximum Growth Stage for Control
Winter wheat Winter barley	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	0.75 + recommended rate of HBN	Cleavers (25 cm) Common chickweed (flowering) Common hemp-nettle (15 cm) Field forget-me-not (10 cm) Black bindweed (10 cm) Henbit dead-nettle (10 cm) Red dead-nettle (10 cm) Knotgrass (10 cm) Common fumitory (10 cm) Groundsel (up to 5 cm) } Mayweeds (up to 5 cm) } Redshank (up to 5 cm) }
Winter oats Winter rye Durum wheat	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	0.75 + recommended rate of HBN	Common field-speedwell (up to 5 cm) } Ivy-leaved speedwell (up to 5 cm) } Pale persicaria (up to 5 cm) } Bugloss (up to 6 true leaves) } Charlock (up to 6 true leaves) } Common poppy (up to 6 true leaves) } Corn marigold (up to 6 true leaves) } Fat-hen (up to 6 true leaves) } Field penny-cress (up to 6 true leaves) } Scarlet pimpernel (up to 6 true leaves) } Shepherd's purse (up to 6 true leaves) } Small nettle (up to 6 true leaves) } Volunteer rape (up to 6 true leaves) } Wild radish (up to 6 true leaves) }
Spring wheat Spring barley Spring oats	Apply from the 2 leaf stage (GS 12) until before second node detectable stage (GS 31)	0.5 + recommended rate of HBN	Cleavers (5 cm) Common chickweed (10 cm) Common hemp-nettle (10 cm) Field forget-me-not (5 cm) Black bindweed (5 cm) Knotgrass (5 cm) Common fumitory (5 cm) Corn spurrey (up to 6 true leaves) } Groundsel (up to 6 true leaves) } Mayweeds (up to 6 true leaves) } Redshank (up to 6 true leaves) } Common field-speedwell (up to 6 true leaves)} Ivy-leaved speedwell (up to 6 true leaves)} Pale persicaria (up to 6 true leaves) } Fat-hen (up to 6 true leaves) } Common orache (up to 6 true leaves) } Common poppy (up to 6 true leaves) } Shepherd's purse (up to 6 true leaves) }

} depends on type and rate of HBN used* * HBNs are products containing ioxynil and/or bromoxynil (refer to Compatibility section).

Use tank-mix partners in accordance with the manufacturer's instructions.

FULL RATE MIXTURE

(Recommended where cleavers, chickweed, hemp-nettle and forget-me-not are more advanced; see maximum growth stages below).

Crop	Timing of Application	Rate L/ha	Weeds Controlled & Maximum Growth Stage for Control
Winter wheat Winter barley	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	1.0 + recommended rate of HBN	Cleavers (flowering) Common chickweed (flowering) Common hemp-nettle (flowering) Field forget-me-not (flowering) Black bindweed (10 cm) Henbit dead-nettle (10 cm) Red dead-nettle (10 cm) Knotgrass (10 cm) Common fumitory (10 cm) Groundsel (up to 5 cm) } Mayweeds (up to 5 cm) }
Winter oats Winter rye Durum wheat	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	1.0 + recommended rate of HBN	Redshank (up to 5 cm) } Common field-speedwell (up to 5 cm) } Ivy-leaved speedwell (up to 5 cm) } Pale persicaria (up to 5 cm) } Bugloss (up to 6 true leaves) } Charlock (up to 6 true leaves) } Common poppy (up to 6 true leaves) } Corn marigold (up to 6 true leaves) } Fat-hen (up to 6 true leaves) } Field penny-cress (up to 6 true leaves) } Scarlet pimpernel (up to 6 true leaves) } Shepherd's purse (up to 6 true leaves) } Small nettle (up to 6 true leaves) } Volunteer rape (up to 6 true leaves) } Wild radish (up to 6 true leaves) }
Spring wheat Spring barley Spring oats	Apply from the 2 leaf stage (GS 12) until before second node detectable stage (GS 31)	0.75 + recommended rate of HBN	Cleavers (15 cm) Common chickweed (flowering) Common hemp-nettle (15 cm) Field forget-me-not (10 cm) Black bindweed (10 cm) Knotgrass (10 cm) Common fumitory (10 cm) Corn spurrey (up to 6 true leaves) } Groundsel (up to 6 true leaves) } Mayweeds (up to 6 true leaves) } Redshank (up to 6 true leaves) } Common field-speedwell (up to 6 true leaves) } Ivy-leaved speedwell (up to 6 true leaves) } Pale persicaria (up to 6 true leaves) } Fat-hen (up to 6 true leaves) } Common orache (up to 6 true leaves) } Common poppy (up to 6 true leaves) } Shepherd's purse (up to 6 true leaves) }

} depends on type and rate of HBN used* * HBNs are products containing ioxynil and/or bromoxynil (refer to Compatibility section).

Use tank-mix partners in accordance with the manufacturer's instructions.

Note: In spring cereals the full rate mixture will also give control of black bindweed, knotgrass and fumitory at later growth stages than with the low rate mixture (see tables for details of maximum growth stages controlled).

C. Autumn Application to Winter Wheat and Winter Barley

HOIST may be applied in the Autumn to winter wheat and winter barley only according to the Crops, Timing and Rates listed in the table below. Weeds which germinate after spraying will not be controlled by an Autumn application of HOIST.

For optimum results, weeds must be actively growing and the crop competitive. This is particularly important with cleavers.

Do not spray if frost is imminent.

Crop	Timing of Application	Rate* L/ha	Weeds Controlled & Maximum Growth Stage for Control
Winter wheat Winter barley	Apply from the 2 leaf stage (GS 12) up until the end of February, or first node detectable stage (GS 31), whichever is sooner. Spring Application recommendations apply from March onwards	0.5-0.75 + recommended rate of HBN	Cleavers (5 cm) Common chickweed (5 cm) Field forget-me-not (5 cm) Henbit Dead-nettle (6 true leaves) Red Dead-nettle (6 true leaves) Charlock (6 true leaves) } Common Poppy (6 true leaves) } Groundsel (6 true leaves) } Mayweeds (6 true leaves) } Shepherd's Purse (6 true leaves) } Common Field-speedwell (6 true leaves) } Ivy-leaved Speedwell (6 true leaves) } Volunteer rape (6 true leaves) }

} depends on type and rate of HBN used* * The 0.75 L/ha rate of HOIST generally gives more consistent results particularly if growing conditions are not ideal. This rate is essential for the control of cleavers.

HBNs are products containing ioxynil and/or bromoxynil (refer to Compatibility section). Use in accordance with the manufacturer's instructions.

GENERAL INFORMATION

MIXING INSTRUCTIONS

Shake the container before use. Place half the required amount of clean water in the spray tank and commence agitation. Add the required amount of HOIST. Rinse all used containers thoroughly and add the washings to the spray tank. The use of sprayer mounted pressure rinsing equipment is advised. If not available, containers should be manually rinsed three times. Add the remaining water requirement and continue agitation. The spray mix must be used immediately, maintaining continuous agitation until spraying is completed.

Do not allow the spray mixture to stand. Immediately after use wash sprayer and other equipment thoroughly with water and detergent. Traces of HOIST in the spray tank could damage susceptible crops when the sprayer is used subsequently.

Dispose of empty rinsed containers according to the HSE Code of Practice for using Plant Protection Products.

METHOD OF APPLICATION

Apply by means of a conventional hydraulic nozzle tractor mounted or trailed sprayer (with or without air-assistance).

Ensure that the sprayer is correctly calibrated to apply the recommended water volume and spray quality and the boom height and nozzles are adjusted to give even coverage of the target weeds. In grassland, small areas may be treated by knapsack or other hand-operated sprayer. Spray individual weeds to the point just prior to run-off. Ensure that the sprayer is correctly calibrated to apply the recommended dose and water volume.

WATER VOLUME

Use a volume of water within the recommended range of 200-400 L/ha that will give a good even cover of the weed foliage. See recommendations under Crop Specific Information.

The minimum recommended pressure is 2 to 3 bar.

The lowest volume of water should only be used in very open crops on small weeds. On later applications where the crop is dense, the spray volume should be increased to 400 litres of water per hectare.

SPRAY QUALITY

Apply as a MEDIUM spray (as defined by BCPC).

TANK MIXES

To broaden the range of weeds controlled, HOIST can be tank-mixed with a number of herbicides. If using tank-mixes, unless directed otherwise the preferred order of addition of products to the tank is: water dispersible granules, Wettable powders, suspension concentrates (flowables), emulsifiable concentrates, solution concentrates. Each product must be added to a half-full sprayer and be fully dispersed before the addition of the next product.

Tank-mixes must only be applied within the label recommendations of every product in the mix.

COMPATIBILITY

The weed spectrum can be broadened by tank-mixing with a range of different herbicides. HOIST is compatible with a number of HBN product, Contact Agform Ltd for compatibility information on specific tank-mixes. HBNs are products containing ioxynil and/or bromoxynil Use tank-mix partners in accordance with the manufacturer's instructions. Ensure that all crop and timing restrictions required for HOIST and the partner HBN product are adhered to.

CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable but, as we cannot exercise control over their storage, handling, mixing or use or the weather conditions before, during or after application, which may affect the performance of the goods, 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 or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.