

Headland Spear

A selective herbicide for control of broad-leaved weeds

Contains 500 g/l (44.25% w/w) MCPA as the dimethylamine salt

Crops: Winter and spring wheat, barley, rye and oats (including undersown with red clover or grass), grassland, grass seed crops.

Pack size: 10 litres

Packs/pallet: 36 x 2 x 10 litres

Introduction: Headland Spear may be applied to all commercially available varieties of winter and spring wheat, barley, rye and oats and to grass seed crops and established grassland.

For best results, spray when annual weeds are at the seedling stage and perennial weeds when the flower buds are forming provided the crop is at the recommended stage for treatment. Spraying should ideally be carried out in warm weather when the weeds are growing vigorously.

Warning: Extreme care must be taken to avoid spray drift onto neighbouring crops, outside the target area.

Do not spray in windy weather. Avoid drift onto neighbouring crops, especially beans, beet, brassicas, carrots, legumes, lettuce and tomatoes, all of which are very susceptible.

Restrictions: Do not roll or harrow crops within a week of spraying
Do not mow within 4 weeks of application. The first 4 mowings after treatment must be composted for at least 6 months before use.
Do not treat newly established grass less than 1 year old.
Do not treat grass suffering from drought, disease, in freezing conditions, when rain is imminent or other adverse factors.
Do not apply before undersowing
Wash all equipment thoroughly after use. Rinse with water three times, 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
Do not apply in volumes less than 200 litres of water per hectare

Directions for

Use: Cereals Application Timings

1. Winter wheat, barley, oats and rye
Apply Headland Spear in the spring from the leaf sheath erect stage until before the first node is detectable.
2. Spring wheat, barley and rye

Apply from the five-leaf stage until before the first node is detectable.. Applications under very hot conditions can cause ear damage if the crop comes under stress at or after application.

Barley is especially susceptible to malformation and particular attention must be paid to the correct growth stage if the crop is intended for malting.

3. Spring oats

Apply from the 1-leaf stage until before the first node is detectable.

Application Rates and Water Volumes

Apply 1.4 to 3.3 litres/ha depending on the weed species present – see Weed Control table below.

Use 200 - 400 litres of water/ha.

Directions for

Use –

Undersown

Cereals:

Application Timings

1. Red Clover

Applications should be made when the red clover has at least 2 trifoliolate leaves and the cereal is at the correct growth stage as given above. Only apply if the weed canopy is dense and covers most of the clover seedlings. Some damage to red clover must be expected but this will normally be outgrown. Do not apply Headland Spear if white clover is present.

2. Grasses

Application should be made when the grasses have begun to tiller and the cereal crop is at the correct stage as listed above.

Application Rates and Water Volumes

1. Red Clover

Apply up to 1.4 litres/ha to cereals undersown with red clover.

2. Grasses

Apply up to 2.7 l/ha to cereals undersown with grasses only.

Use 200-400 litres of water/ha.

Do not apply to cereals undersown with lucerne, peas or sainfoin.

Weed Control

- Cereals: Headland Spear will control the following weeds at the rates and growth stages indicated:

Susceptible at 1.4 litres/ha up to 6 expanded true leaves or 100 mm across/high:

Black Mustard	Charlock	Fat-hen
Field Penny-cress	Treacle Mustard	White Mustard

Susceptible at 1.6 litres/ha up to 2 expanded true leaves:

Corn Buttercup	Treacle Mustard	Shepherd's-purse
Wild Radish (runch)		

Susceptible at 2.7 litres/ha up to 6 expanded true leaves or up to 100 cm across/high

Vounteer Oilseed Rape

Moderately susceptible controlled at 2.7–3.3 litres/ha up to 2 expanded true leaves, checked up to 100 mm across/high:

Common Fumitory	Common Hempnettle
Common Orache	Common Poppy
Creeping Thistle	Field Gromwell
Small Nettle	Wild Cabbage
Smooth Sow-thistle	

Moderately resistant checked by 2.7-3.3 litres/ha up to 2 expanded true leaves

Black Bindweed	Common Chickweed	Corn Chamomile
Corn Spurrey	Field Pansy	Groundsel
Knotgrass	Pale Persicaria	Redshank
Scentless Mayweed	Speedwells	

Moderately Resistant checked by 3.3 litres/ha up to 2 expanded true leaves

Creeping buttercup	Hoary Cress	Shepherd's-needle
Tares (Vetches)	Perennial Sow-thistle	

Directions

For Use –

Grassland: Application Rates and Timings

1. Grassland

Headland Spear should be applied to grassland and leys not less than one year old grassland at 2.7-3.3 litres/ha. Apply in the spring and summer when conditions are favourable. spray grass for hay or silage 3-4 weeks before cutting.

Any clover present in the sward will be checked but should recover the following spring. A follow-up application may be needed when new

seedling weeds appear. A top dressing 10 days before treatment is recommended to assist kill of weeds and subsequent recovery of the sward. An interval of 4-6 weeks should elapse between successive applications if weeds persist. Do not make more than 2 applications per year.

A top dressing ten days before treatment is recommended to assist kill of the weeds and the subsequent recovery of the sward. Annual species will be best controlled if sprayed when the majority are seedlings. Perennial weeds should be sprayed during their period of maximum growth, usually when the flower buds are beginning to form.

The response of perennial weeds to treatment is often variable with only the aerial parts killed though suppression will often occur. The recovery of weeds will be reduced if the grass is growing vigorously at the time of treatment.

2. Grass Seed Crops

Apply Headland Spear at up to 3.2 litres/ha. Spray when the grasses have at least 4 leaves and begun to tiller but at least 5 weeks before heading. The best time varies with the species and strain of grass concerned.

Water Volumes

Use 200 - 400 litres of water/ha.

Weed Control

- **Grassland:** Headland Spear will control annual weeds as listed under Cereals above.

When applied at 2.7-3.3 litres/ha Headland Spear will also control perennial weeds as listed below:

Susceptible - consistently good control of roots and shoots

Greater Plantain Ribwort Plantain

Moderately susceptible - weeds suppressed and top growth usually killed

Autumn Hawkbit Cats-ear Common Knapweed
Compact Rush (2) Creeping Buttercup (2) Creeping Thistle (3)
Common Daisy Common Ragwort (4) Hoary Cress
Meadow Buttercup (4) Self-heal Soft Rush (1)
Spear Thistle

(1) Spray in April-June. Cut and remove stems either 4 weeks before or 4 weeks after treatment.

(2) Treat in spring or early summer

(3) Treat at early flowerbud stage

(4) Spray in the spring at the rosette stage before the flowerbuds start to grow.

Moderately resistant - top growth only may be killed

Bulbous Buttercup (1)	Colt's-foot	Common Nettle
Common Sorrel	Curled Dock (2)	Dandelion
Dwarf Thistle	Hard Rush (3)	Horsetails (4)
Meadow-sweet	Perennial Sow-thistle	Sheep's Sorrel
Yarrow		

- (1) Treat in autumn on new leaf, or in the spring
- (2) Treat pre-flowering or after defoliation
- (3) Treat as Compact Rush – see above
- (4) Shoots only controlled. Apply in May or June

Mixing and

Application: Half-fill the spray tank and start agitation. Add the required amount of Headland Spear. Add the rest of the water and agitate gently until the contents are thoroughly mixed. Maintain agitation until spraying is completed. Apply using a medium/coarse spray (BCPC definition).

Wash all equipment thoroughly after use. Rinse with water three times, 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.

Compatibility: Headland Spear is compatible with many spray-applied agricultural chemicals. Consult your distributor for the latest information. Alternatively, up-to-date compatibility information may be found at www.headland-ag.co.uk.

Headland Spear is *incompatible* with manganese sulphate

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 dominant. 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 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 advisor or product manufacturer.

Storage: Keep dry and cool in a suitable pesticide store. Protect from frost.

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 GLOVES AND FACE PROTECTION (FACE-SHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

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

WASH CONCENTRATE from skin or eyes immediately

WHEN USING DO NOT EAT DRINK OR SMOKE

WASH HANDS AND EXPOSED SKIN before meals and after work
IF YOU FEEL UNWELL seek medical advice (show the label where possible).

b. Environmental Protection

DO NOT ALLOW DIRECT SPRAY from ground crop sprayers to fall within 5 m of the top of the bank of a static or flowing water body unless a Local Environmental 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.

This product qualifies for inclusion within the Local Environmental Risk Assessment for Pesticides (LERAP) scheme. A LERAP must be carried out in accordance with CRD published guidance before each spraying operation from a ground crop sprayer. The results of the LERAP must be recorded and kept available for inspection for three years.

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

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

c. Storage and Disposal

KEEP OUT OF REACH OF CHILDREN

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING-STUFFS

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

WASH OUT CONTAINER THOROUGHLY and dispose of safely

d. Other Specific Restrictions

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

Do not apply before the end of February in the year of harvest.

KEEP LIVESTOCK OUT of treated areas until poisonous weeds such as Ragwort have died and become unpalatable.

Do not apply in volumes less than 200 litres of water per hectare
Do not apply by hand-held equipment.
DO NOT RE-USE CONTAINERS for any purpose

Important

Information: FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

<u>Crop</u>	<u>Maximum Individual Dose:</u>	<u>Max no. of Treatments</u>	<u>Latest Timing</u>
Wheat, barley, oats, rye	3.3 litres/ha	1 per crop	Before 1 st node detectable
- undersown with red clover	1.4 litres/ha	1 per crop	Before 1 st node detectable
- undersown with grass	2.7 litres/ha	1 per crop	Before 1 st node detectable
Permanent grassland	3.3 litres/ha	2 per year	n/a
Grass seed crops	3.2 litres/ha	1 per year	5 weeks before heading

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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.

Regulatory

Information: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (CHIP-4) apply to this product.

Hazard Symbols: Harmful Xn
Dangerous for the Environment N

Risk Phrases:	R22	Harmful if swallowed.
	R37	Irritating to respiratory system
	R41	Risk or serious damage to eyes
	R50/53	Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Safety Phrases:	S2	Keep out of reach of children
	S26	In case of contact with eyes rinse immediately with plenty of water and seek medical advice
	S35	This material and its container must be disposed of in a safe way.
	S39	Wear eye/face protection.
	S57	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.

Product Registration Number MAPP 14910

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

Transport: This product is not classified as hazardous for transport.

Date of latest revision: March 2011

Significant changes since last issue: Transport classification