

ECOTOXIC
KEEP OUT OF REACH OF CHILDREN



HEAD[®] START

A stylized illustration of green grass blades, rendered in various shades of green, growing from a dark blue, wavy horizon line.

HERBICIDE

Contains: 50g/litre flumetsulam in the form of an oil dispersion

**For broadleaf weed control in clover, lucerne,
chicory, new pasture and mature pasture**

The ZELAM logo, consisting of the word 'ZELAM' in a bold, white, sans-serif font, enclosed within a white double-lined circle on a dark blue background.

ZELAM

PLEASE READ THE ENTIRE LABEL BEFORE MIXING OR USE. SHAKE OR STIR WELL BEFORE USE.

HAZARD CLASSIFICATION; 6.3B, 6.4A, 9.1A, 9.2B

APPROVED HANDLER: This product must be under the control of an approved handler during use. This product must not be used for any purpose or in any manner, contrary to this label, unless authorised under appropriate legislation.

RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept under certain circumstances. See MSDS for details.

WARNING: May cause skin and eye irritation. Avoid contact with skin or eyes.

FIRST AID: If swallowed do NOT induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. DO NOT scrub the skin. If splashed in eyes, wash out immediately with water for at least 15 minutes.

PERSONAL PROTECTION: Avoid skin and eye contact and inhalation of spray mist. When mixing or applying wear waterproof gloves, eye protection, boots and overalls. Do not eat, drink or smoke while using. Wash splashes of concentrate from skin immediately. Ensure adequate ventilation when handling the concentrate. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

ECOTOXIC: Very toxic to fish and aquatic organisms. Avoid contamination of any water supply with product or empty container. Toxic to the soil environment.

STORAGE: Store in original container, tightly closed and in a dry, cool area away from foodstuffs. Store in accordance with NZS 8409 Management of Agrichemicals.

DISPOSAL: Triple rinse empty container and add rinsate to the spray tank. If recycling, discard cap and deliver clean container to an Agrecovery depot. Alternatively crush and bury in an approved landfill.

Dispose of product only by using according to this label, or at an approved disposal facility.

SPILLAGE: Wear appropriate protective clothing. Exclude all bystanders from the vicinity of the spill, and prevent material from entering waterways. Contain liquid spills and absorb with inert material and place in waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely in an approved landfill.

MATERIAL SAFETY DATA SHEET: Additional information is listed in the MSDS available from Zelam Ltd or www.zelam.com.

Approved pursuant to the HSN Act 1996, No HSR100555. See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, No. P008493 See www.foodsafety.govt.nz for registration conditions.

DIRECTIONS FOR USE:

Headstart will control or suppress indicated broadleaf weeds while maintaining selectivity to clover, lucerne, chicory and pasture.

Apply to weeds in active growth. Do not apply in wet cold conditions.

RATE/HA	WEEDS CONTROLLED	CRITICAL COMMENTS
500 mL	Chickweed, spurrey, wild radish, hedge mustard	Apply before the 4th leaf growth stage
800 mL	Amaranthus (redroot), broadleaved dock, cleavers, black nightshade, fathen, inkweed, shepherds purse, storksbill, twincrest, mallow	Apply before the 4th leaf growth stage
	Annual buttercup, creeping yellow cress, yellow gromwell	Apply before flowering
1.0 litre	Larger weeds (above)	
	Stinking mayweed, wireweed, sorrel	Apply to young seedlings
	Dandelion, hawkbit, scrambling speedwell	Apply before the 4th leaf growth stage. Effectiveness on these weeds may be limited during periods of cold conditions.
	Nodding thistle	Apply before the 6th leaf growth stage
	Field madder, field pansy, henbit, willow weed, oxeye daisy	Apply to young seedlings for suppression only
	Giant buttercup	Apply before flowering

NOTE for BUTTERCUP CONTROL in MATURE PASTURE: Headstart may be applied in either spring or autumn for buttercup control. Repeat spring treatments for two successive seasons will maximise control of giant buttercup.

APPLICATION TIMING:

To maximise crop safety observe the following application timing guidelines.

CROP	CROP GROWTH STAGE
New Pasture	Apply once clover has developed at least two trifoliolate leaves
New and established white clover seed crops	Apply once clover has developed at least four trifoliolate leaves but before stolon elongation
New and established red clover seed crops and subterranean clover	Apply once clover has developed at least six trifoliolate leaves but before stolon elongation
Established lucerne	Apply before flowering. See compatibility section
New and established chicory	Apply once chicory has developed at least four true leaves

MIXING: Pour the correct amount of Headstart into the partly filled tank, and while agitating add the remainder of the water. Maintain agitation during spraying and any stoppages. Only mix sufficient spray for immediate use and avoid storing. When tank mixing add Headstart last.

ADJUVANTS: Headstart contains an inbuilt surfactant system. DO NOT add any further surfactant or spraying oil.

COMPATIBILITY: Headstart is compatible with relevant selective crop and pasture herbicides including MCPB and triazines. Refer to the tank mixture herbicide product labels for further instructions.

Do not tank mix triazine herbicides with Headstart on lucerne during active growth as unacceptable crop suppression may occur.

APPLICATION:

Prevent spray drift as it may cause severe damage to non-target plants.

Boom Spraying (aerial and ground): Use 100 to 300 litres water per hectare as a medium quality spray. For dense weed infestations use the higher water rate.

CDA Spraying: For pasture weeds use no less than 30 litres water per hectare and a droplet size of 250 to 300 microns. CDA application may result in less effective weed control than with conventional boom spraying.

CROP ROTATIONS: Do not plant susceptible crops, including but not limited to all brassica species, beans, lupins and sunflowers until three months after application of Headstart. Do not allow spray drift onto susceptible crops or land to be planted with susceptible crops.

SPRAY EQUIPMENT CLEANING

BEFORE using Headstart:

If the equipment has been used to apply any sulfonyleurea compounds it must be decontaminated according to the instructions on the sulfonyleurea product label before using Headstart. Even trace amounts of sulfonyleurea herbicides can cause serious damage to crops likely to be sprayed with Headstart.

AFTER using Headstart:

Rinsing: After using Headstart empty the spray unit and completely drain the whole system. Thoroughly clean all sprayer parts including tank, pump, hoses, filters and nozzles with several flushes of clean water.

Decontamination: To avoid injury to subsequently sprayed sensitive crops including but not limited to brassicas, beans, lupins and sunflowers thoroughly remove all traces of Headstart from mixing and spray equipment. Wash the system as above then quarter fill the tank and add a standard alkali based laundry detergent at 500g (or ml) per 100 litres and circulate throughout the system for fifteen minutes. Drain system and repeat the rinsing as above. Do not use chlorine based cleaners.

ANIMAL SAFETY: Poisonous plants including but not limited to giant buttercup and black nightshade may become more palatable after spraying. If concerned that stock health may be affected livestock should be kept out until plants have died down.

It is an offence for users of this product to cause residues exceeding the relevant MRL in Food Notice: Maximum Residue Levels for Agricultural Compounds.

GRAZING WITHHOLDING PERIOD: 14 days. See also animal safety and crop rotation sections.

RESISTANCE MANAGEMENT: **GROUP B HERBICIDE** Headstart contains a triazolopyrimidine herbicide with the ALS (acetolactate synthase) inhibition mode of action. Some chickweed biotypes resistant to ALS herbicides do exist and other naturally occurring weed biotypes may become resistant with excessive use of the same herbicide. To maximise the long term effectiveness of this group of herbicides consider herbicide rotation with products with a different mode of action. Use Headstart strictly in accordance with the label directions especially with respect to rate and weed growth stage. See www.nzpps.org for alternate modes of action and the details of resistance management strategies (if any) for the weeds listed on the label.

NOTICE TO BUYER: The manufacturer and vendors of Headstart warrant the formulation to contain the specified active ingredient within accepted tolerance but make no warranty of any kind on the uses of material and accept no responsibility, whether the material is used in accordance with the label directions or not.

REGISTERED TO: Zelam Limited, Hudson Rd, New Plymouth, New Zealand.

Tel: 06 755-9234 Fax: 06 755-1174

EMERGENCY PHONE: 0800 CHEMCALL 0800 243 6225