

**HARMFUL, CORROSIVE,  
ECOTOXIC  
KEEP OUT OF REACH OF CHILDREN**



# HERBICIDE

**Contains:** 17g/litre flumetsulam plus 480 g/litre bentazone in the form of a soluble concentrate

**For broadleaf weed control in pasture, clover seed crops, lucerne and turf**

**ZELAM**

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

**HAZARD CLASSIFICATION:** 6.1D, 6.5B, 6.8A, 6.9A, 8.1A, 8.2C, 8.3A, 9.1A, 9.2C, 9.3B

**APPROVED HANDLER:** This product must be under the control of an approved handler during use. See MSDS for details.

**RECORD KEEPING:** Records of use as described in NZS 8409 Management of Agrichemicals must be kept whenever Dynamo is used.

**DANGER:** Corrosive to the skin and eyes, may cause skin burns and eye damage. Avoid skin and eye contact. May cause reproductive/developmental damage from repeated oral exposure. May cause organ damage from repeated oral exposure at high doses.

**WARNING:** May be harmful if swallowed, inhaled or absorbed through the skin. May cause skin sensitisation from prolonged skin contact.

**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. If splashed in eyes, wash out immediately with water.

**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. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

**ECOTOXIC:** Very toxic to aquatic plants. Avoid contamination of any water supply with product or empty container. Harmful to the soil environment. Toxic to terrestrial vertebrates.

**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 the label, or at an approved landfill.

**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](http://www.zelam.com)

Approved pursuant to the HSNO Act 1996, No: HSR 100817. See [www.epa.govt.nz](http://www.epa.govt.nz) for approval conditions.

Registered pursuant to the ACVM Act 1997, No: P008912 See [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions.

**PATENT:** New Zealand patent # 627043

**GENERAL INFORMATION:**

Dynamo will control or suppress indicated broadleaf weeds while maintaining selectivity to listed crops and pasture. Apply during warm weather for optimum results. Do NOT apply if frost is expected.

**DIRECTIONS FOR USE - WEEDS CONTROLLED**

Apply to weeds in active growth. Do not apply in wet and/or cold/frosty conditions.

RATE/HA	WEEDS CONTROLLED	CRITICAL COMMENTS
1.5 litres	Chickweed, spurrey, wild radish, hedge mustard	Apply before the 4th leaf growth stage
2.4 litres	Amaranthus (redroot), black nightshade, broad-leaved dock, chamomiles, cleavers, fathen, inkweed, mallow, shepherds purse, stinking mayweed, storksbill, thorn apple, twincross, wild turnip	Apply before the 4th leaf growth stage
	Annual buttercup, creeping yellow cress, yellow gromwell	Apply before flowering
3.0 litres	Larger weeds (above)	
	Onehunga weed, sorrel, wireweed	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 to true seedlings without well-developed tap-roots before 6th leaf growth stage.
	Field madder, field pansy, henbit, willow weed, oxeye daisy	Apply to young seedlings for <b>suppression only</b>
	Giant buttercup	Apply before flowering

**NOTE for BUTTERCUP CONTROL in MATURE PASTURE:**

Dynamo may be applied in either spring or autumn for buttercup control. Repeat spring treatments for two successive seasons will maximise control of giant buttercup. Dynamo will control giant buttercup that is resistant to Group O1 herbicides such as MCPA.

**APPLICATION TIMING:**

To maximise crop safety observe the following application timing guidelines.

CROP	CROP GROWTH STAGE and TANK MIXTURES	CRITICAL COMMENTS for PLANTAIN as a COMPONENT of pasture.
New pasture	Apply once clover has developed at least two trifoliate leaves. May be applied with MCPB.	Apply once the plantain has at least two to four true leaves. A period of severe suppression is expected where the plantain will stop growing and turn yellow resulting in a reduction in forage yield. The plant population is normally retained and the crop will recover. The period of suppression lasts for several weeks depending on site and environmental conditions such as soil moisture and temperature. It will be longer and may last till late winter following Autumn applications as temperatures decline or during a dry spell. The other pasture components (grass and clover) will be released and compensate to an extent. Tonic variety plantain has been tested and other varieties may exhibit poorer tolerance to Dynamo.
Mature pasture	Apply at any time from late winter to late autumn.	Do not use on seed crops as flowering may be delayed and seed yield may be reduced. Do not apply with MCPB. May be tank mixed with a grass selective herbicide where grass is not a desirable component of the pasture.
New and established white clover seed crops	Apply once clover has developed at least two trifoliate leaves but before stolon elongation.	
Established lucerne	Apply after lucerne has developed a tap root and at least six true leaves and before flowering for seedling weeds as above. A period of crop discoloration may occur in sensitive varieties after spring applications especially in young or stressed crops. Apply 1.5 litres/ha with 2 litres/ha 2,4-DB (40%) in Autumn for larger nodding thistle and storksbill. Do not add any surfactant.	
Grass Turf	Apply in October to early November for Onehunga weed or from late Winter to late Autumn for other weeds. Use 30ml/100 square metres in 3 - 5 litres in specialised equipment such as a "Lawnboy". Do not use on turf that contains broad-leaved species as part of the turf.	

**MIXING:** Pour the correct amount of Dynamo 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 Dynamo last.

**ADJUVANTS:** Dynamo is a soluble concentrate and only requires an adjuvant where weeds are particularly difficult to wet such as hairy nightshade. Use a non-ionic wetter where required except in lucerne.

**COMPATIBILITY:** Dynamo is compatible with relevant selective crop and pasture herbicides including MCPB, Ignite and Centurion. Refer to the tank mixture herbicide product labels for further instructions.

**APPLICATION:**

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

**Boom Spraying from ground based equipment:** Use 200 to 300 litres water per hectare as a medium quality spray. For dense weed infestations use higher water rates (up to 500 litres/ha).

**Boom Spraying from aerial based equipment:** Use a water rate and application technology that ensured good and even coverage of all weeds. This is usually 50 to 80 litres water per ha but must be increased to 100 litres or more for dense weed infestations. Aerial application may result in less effective weed control than with conventional boom spraying.

**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.

**RAINFALL:** Results may be reduced if rainfall or irrigation occurs within eight hours of 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 Dynamo. Do not allow spray drift onto susceptible crops or land to be planted with susceptible crops.

**RESISTANCE MANAGEMENT:** [GROUP B+C3 HERBICIDE] Dynamo contains flumetsulam, a triazolopyrimidine herbicide, with the ALS (acetolactate synthase) inhibition mode of action plus bentazone, a benzothiadiazinone herbicide with the inhibition of photosynthesis mode of action. Some chickweed biotypes resistant to ALS herbicides do exist but will be controlled by Dynamo. However other naturally occurring weed biotypes may become resistant with excessive use of this and other group B herbicides. To maximise the long term effectiveness of these herbicides consider herbicide rotation with products with a different mode of action. Use Dynamo strictly in accordance with the label directions especially with respect to rate and weed growth stage. See [www.nzpps.org](http://www.nzpps.org) for alternate modes of action and the details of resistance management strategies (if any) for the weeds listed on this label.

**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 the Food Notice: Maximum Residue Levels for Agricultural Compounds**

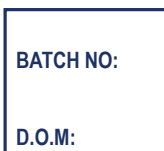
**GRAZING WITHHOLDING PERIOD:** 14 days. See also animal safety and crop rotation sections.

**SPRAY EQUIPMENT CLEANING**

**Rinsing:** After using Dynamo 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 Dynamo 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.

**NOTICE TO BUYER:** The manufacturer and vendors of Dynamo 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.



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