



orion AGRISCIENCE



HARMFUL | ECOTOXIC
KEEP OUT OF REACH OF CHILDREN

Tandem[®]

HERBICIDE

For the control of broadleaf weeds in
PASTURE, GRASS and WHITE CLOVER SEED
CROPS, PEAS and CEREALS.

Active Ingredient:

375 g/litre MCPB and 25 g/litre MCPA as the sodium salts in the form of a soluble concentrate.



200 Litres





PLEASE READ THE LABEL COMPLETELY BEFORE USE

HAZARD CLASSIFICATION: 6.1D, 6.4A, 6.8B, 6.9B, 9.1A, 9.2A, 9.3C

WARNING: TOXIC, ECOTOXIC

May be harmful if swallowed, inhaled or absorbed through the skin. May cause eye irritation. May cause reproductive/development damage from repeated ingestion. May cause liver damage from repeated ingestion at high doses. Very toxic to aquatic organisms and to some plant species. Harmful to terrestrial vertebrates.

PRECAUTIONS

APPROVED HANDLER: This product must be under the control of an approved handler during use.

STORAGE: Keep out of reach of children. Store in the original, tightly closed container, in a secure place away from foodstuffs. Storage of certain quantities of this product trigger specific storage requirements (Refer to Safety Note). When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact your supplier for further information about the use of product that is older than this.

PERSONAL PROTECTION: Avoid contact with eyes and skin. Avoid inhalation of spray mist. When mixing or applying, wear overalls, boots, gloves and eye protection. Clean protective clothing daily after work. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work.

USE: Apply with well maintained and calibrated spray equipment.

DISPOSAL: Dispose of this product only by using in accordance with this label, or at a suitable landfill. Triple rinse container and add rinseate to the spray tank. Dispose of container to a suitable landfill or agricultural recycling scheme. Do not burn. Do not use container for any other purpose.

ENVIRONMENTAL: Use this product carefully. Do not contaminate aquatic environments with product, spray drift or empty container. Spray drift or equipment contamination may cause serious damage to desirable plants. Do not allow spray drift outside the target area to occur.

**DIRECTIONS FOR USE
RATE AND TIMING OF APPLICATION**

CROP	RATE PER HECTARE	CRITICAL COMMENTS
Cereals	3 – 4 litres	Apply when crop is between the 2 leaf stage and first node stage. Use the higher rate if weeds have more than 3 leaves. Do NOT use on crops undersown with lucerne or clover.
Grass Seed Crops (cocksfoot, dogstail, ryegrass, timothy, etc)		Apply to seedling weeds and well before crop seed head emergence.
Pasture		New Pasture: Apply after clover has developed 2 trifoliolate leaves and when weeds are at the seedling stage. Established Pasture: Use higher rate if weeds are past the seedling stage.
Peas		Apply between the 5 - 7 node growth stage of the crop. Some temporary twisting of the crop may occur. Do NOT apply with other herbicides. As heavy rain may remove the crops protective waxy layer, delay treatment until crystal violet test confirms crop safety.
White Clover Seed Crops		Apply in spring to actively growing seedling weeds. Do NOT apply after the crop has commenced flowering.

APPLICATION METHODS

Tandem can be applied with conventional ground and aerial equipment. Use a water rate of 150 – 250 litres per hectare for ground spraying. Use the higher rate to improve effectiveness on difficult to control perennial pasture weeds. For aerial application, use 30 – 100 litres of water per hectare. With aerial application, to minimise damage to susceptible vegetation within 500 metres, use low drift nozzles which minimise the production of small droplets (100 microns). For spot treatment, use at a rate of 10mL per litre (1% solution), and spray sufficient to wet foliage thoroughly.

MIXING

Partly fill the spray tank with water, and add the required quantity of Tandem. Maintain agitation through filling and spraying. Where water with a high pH or water containing calcium salts cannot be avoided, the addition of a pH Buffer is recommended to reduce chemical deactivation and hydrolysis.

RAINFALL

Do not spray if rain is expected within 6 hours of spraying.

WITHHOLDING PERIODS

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. New Zealand (Maximum Residue Limits of Agricultural Compounds) Food Standards.

Poisonous plants, e.g. ragwort, may become more palatable after spraying, and livestock should be kept out until plants have died down. Except for animal safety, no withholding period is required when used as directed.

RESISTANCE MANAGEMENT

GROUP 01 HERBICIDE

Tandem contains the active ingredients MCPB and MCPA, group 01 herbicides belonging to the phenoxy chemical family. Some naturally occurring weeds may become resistant when excessive use of the same herbicide occurs. To prevent or delay the development of resistance, use in tank mixes and/or rotate with herbicides with a different mode of action. Consult <http://resistance.nzpps.org/index.php> for alternative modes of action and details of resistance management strategies (if any) for the crops listed on the label.

WARRANTY

This formulation is warranted to contain the specified active ingredient within accepted analytical tolerance when packed. The user bears the risk for damage resulting from factors beyond the manufacturer's control. The manufacturer declines all liability for damage resulting from improper storage or use of the product.

Registered pursuant to the ACVM Act 1997, No. P7655

See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to the HSN0 Act 1996, No. HSR000726

See www.epa.govt.nz for approval conditions.

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www.orionagriscience.co.nz



AGRISCIENCE

First Aid

If swallowed do not induce vomiting. If splashed in eyes, wash out immediately with running water for several minutes. If skin or hair contact occurs, remove contaminated clothing and wash with soap and running water. If inhaled, immediately move to fresh air and rest. Maintain half upright position if breathing is difficult. Call the National Poisons Centre **0800 POISON (0800 764 766)** (24 hrs) or a doctor immediately for advice.

Emergency Response

In a transport emergency call **111, Police or Fire Brigade**. For specialist advice in an emergency only, call **0800 CHEMCALL (0800 243 6225)** (24 hrs).

Spillage

Exclude non-essential people from the area. Wear protective clothing and prevent material from entering waterways. Absorb spill with inert material such as soil, sand, etc, and place in a waste container. Wash area with water, and absorb with further inert material. Dispose of safely to a suitable landfill.

Safety Data Sheet

Additional information is provided in the safety data sheet. Freephone **0800 ORIONAS (0800 674 6627)** or visit www.orionagriscience.co.nz.

GENERAL INFORMATION

Tandem is a non-volatile selective herbicide for control of a range of broadleaf weeds in pasture, grass and white clover seed crops, peas and cereals. Best results are obtained when weeds are actively growing and are in the early seedling or early rosette stage of growth. Avoid application where the crop or weeds are under stress, eg, frost, drought, water logged, etc.

Weeds Controlled:

Weed	Notes
Annual buttercups, fathen, Scotch thistle	Controlled at all growth stages before flowering.
Black nightshade, giant buttercup, redroot, twin cress	Controlled at seedling stage (2 – 3 leaves). Useful suppression at later growth stages.
Californian thistle	Treat at flower bud stage with 4L/ha
Combind, docks (seedling), hedge mustard, nettle, wild turnip, willow weed, wireweed	Controlled at seedling stage (2 – 3 leaves) only with 4L/ha. Useful suppression at later growth stages.
Thistles – Nodding, winged, variegated	Controlled at seedling stage (2 – 3 leaves) with 4 L/ha. Useful suppression at later growth stages

Weeds Not Controlled: Chickweed, chamomiles, cleavers, daisy, dandelion, docks (mature), ragwort, rushes, speedwell, spurry, stinking mayweed

TANDEM

Batch No:

Date of manufacture:

