

**orion** AGRISCIENCE



**WARNING**  
KEEP OUT OF REACH OF CHILDREN



# Tandem<sup>®</sup>

## 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



9 421004 532891

**20 Litres**

**PLEASE READ THE LABEL COMPLETELY BEFORE USE**

**HAZARD CLASSIFICATIONS:** Acute oral toxicity Category 4, Eye irritation Category 2, Reproductive toxicity Category 2, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1

**WARNING: TOXIC, ECOTOXIC**

Harmful if swallowed. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects. Toxic to the soil environment. Harmful to terrestrial vertebrates.

**PRECAUTIONS:****HANDLING REQUIREMENTS**

This product must only be handled, mixed and applied by a suitably qualified person as defined under the HPC notice 2017 Part 4C.

**RECORD KEEPING**

Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3 L or more is applied within 24 hours and likely to leave the application area.

**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 afterwork. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work.

**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.

**DISPOSAL:**

Dispose of this product only by using in accordance with this label, or at a suitable landfill. Triple rinse container and add rinsate 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:**

Take all reasonable steps to ensure that this product does not cause any significant adverse effects to the environment beyond the application area. Do not apply directly into or onto water. Ecotoxic herbicide. Not for use in home gardens. Do not use for treating turf that will be mown and the clippings used for making compost, or made available for collection for, or deposited at, a municipal green waste recycling depot.

**FIRST AID**

If medical advice is needed, have product container or label at hand.

If swallowed do not induce vomiting. If in eyes, Rinse cautiously with running water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists, get medical attention. Call the National Poisons Centre **0800 POISON (0800 764 766)** (24 hrs) or a doctor 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](http://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, waterlogged, etc.

**Weeds Controlled:**

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

Batch No:

Date of manufacture:

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

Apply with well maintained and calibrated spray equipment.

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 (cockfoot, dogstail, ryegrass, timothy, etc)		Apply to seedling weeds and well before crop seed head emergence.
Pasture		New Pasture: Apply after clover has developed 2 trifoliate 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 wax 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**

Add the required quantity of Tandem into partly filled spray tank and add the remainder of the water. 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 2 hours of spraying.

**WITHHOLDING PERIODS**

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

Poisonous plants, e.g. ragwort, may become more palatable after spraying, and livestock should be kept out until plants have died down. Otherwise, withholding is not required. However, it is recommended that grazing or cultivating treated plants is delayed for 1 day after treatment.

**RESISTANCE MANAGEMENT**

GROUP	4	HERBICIDE
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Tandem contains the active ingredients MCPB and MCPA, group 4 herbicides belonging to the phenoxo 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 use 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](http://www.foodsafety.govt.nz) for registration conditions.

Approved pursuant to the HSNO Act 1996, No. HSR000726

See [www.epa.govt.nz](http://www.epa.govt.nz) for approval controls.

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