

CAUTION

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Nufarm
TROOPER[®]
HERBICIDE

ACTIVE CONSTITUENTS: 420g/L MCPA present as potassium salt
26g/L PICLORAM present as potassium salt

GROUP **I** HERBICIDE

For the control of climbing buckwheat, common sowthistle,
skeleton weed, capeweed, doublegee and other broadleaf weeds
in winter cereals and linseed crops.

IMPORTANT: READ THIS BOOKLET
BEFORE USING THIS PRODUCT.

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NRA Approval No.: 55555/0703



**PROTECTION OF WILDLIFE, FISH, CRUSTACEA
AND ENVIRONMENT**

DO NOT contaminate streams, rivers or waterways with the chemical or used container.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Refillable containers (1000L only):

Store in the closed, original container in a cool, well ventilated area away from children, animals, food, feedstuffs, seed and fertilizers. DO NOT store for prolonged periods in direct sunlight.

Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

Envirodrum 110L Mini Bulk Returnable Container:

Store the original sealed Envirodrum™ in a cool well ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with the Micro Matic valve or the security seal. DO NOT contaminate the Envirodrum with water or any foreign matter.

After each use of the product, please ensure that the Micro Matic coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the Envirodrum have been used, please return the empty Envirodrum to the point of purchase. The Envirodrum remains the property of Nufarm Australia Limited.

SMALL SPILL MANAGEMENT

Wear protective equipment (See SAFETY DIRECTIONS). Apply absorbent material such as earth, sand, clay granules or cat litter to the spill. Sweep up material for disposal when absorption is completed and contain in a refuse vessel for disposal (See STORAGE AND DISPOSAL section). If necessary, wash the spill area with an alkali detergent and water and absorb as above the wash liquid for disposal as described above.

SAFETY DIRECTIONS

Harmful if swallowed. Attacks eyes. Will irritate the skin. Avoid contact with eyes and skin. If product in eyes, wash it out immediately with water. DO NOT inhale spray mist. When preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, a face shield or goggles. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves, goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone **13 11 26**).

MATERIAL SAFETY DATA SHEET

For further information refer to the Material Safety Data Sheet (MSDS).

CONDITIONS OF SALE

"Nufarm Australia Limited" ('Nufarm') shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on Nufarm's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Nufarm has any authority to add to or alter these conditions.

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In case of emergency: Phone 1800 033 498

Ask for shift supervisor. Toll free 24 hours.

Batch Number:

Date of Manufacture:

DIRECTIONS FOR USE:

RESTRAINTS:

DO NOT apply to crops or weeds which are not actively growing or to plants which may be stressed (not actively growing) due to prolonged periods of extreme cold, moisture stress (water-logged or drought affected) or previous herbicide treatment, as crop damage or reduced levels of control may result.

DO NOT use in high winds.

DO NOT spray if rain is likely to occur within four hours.

DO NOT apply close to, or on areas, containing roots of desirable vegetation, where treated soil may be washed into areas growing, or to be planted to, desirable plants, or on sites where surface water from heavy rain can be expected to run off to areas containing, or to be planted to, susceptible crops or plants.

DO NOT move soil which may have been sprayed to areas where desirable plants are to be grown.

Table 1: NEW SOUTH WALES and QUEENSLAND only

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE /ha	CRITICAL COMMENTS
Barley, Canary grass, Oats, Triticale, Wheat	Apply from early tillering (when the main shoot has 4-5 leaves and 2 or more new tillers have formed) to start of jointing (first node (Z30)).	Climbing buckwheat (black bindweed)	Up to 6 leaf	1L	For best control of climbing buckwheat apply at early tillering as this weed becomes increasingly difficult to control as it becomes larger. To avoid possible crop damage, DO NOT spray outside the early tillering to early jointing stage.
		Common sowthistle Doublegee (spiny emex) Mustard Saffron thistle Skeleton weed Turnip weed Variegated thistle Wild radish Wild turnip	Young rosette or seedling plants up to 8 true leaves		
		N.Z. spinach Wireweed	Up to 4 leaf		
Barley, Triticale, Wheat		Common sowthistle N.Z. spinach Wireweed	Apply up to 4 leaf stage	800mL + 5g Brushkiller /Associate	Add Chemwet 1000 at 100mL/100L water
Linseed Linola	Apply when crop is 8-20cm high	Climbing buckwheat (black bindweed) Doublegee (spiny emex) Mustard Saffron thistle Skeleton weed Variegated thistle Wild radish Wild turnip	Young rosette or seedling plants up to 4 true leaves.	670 to 840mL	Use the higher rate when climbing buckwheat is present or weed growth is advanced.
		N.Z. spinach Wireweed	Up to 2 leaf		

Table 2: WESTERN AUSTRALIA only

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE /ha	CRITICAL COMMENTS
Barley, Canary grass, Oats, Triticale, Wheat	Apply from 3 leaf to early tillering (when the main shoot has 4-5 leaves and 2 or more new tillers have formed) to start of jointing (first node Z30)).	Capeweed Doublegee Saffron thistle Turnip weed Wild mustard Wild turnip	Young rosette or seedling plants up to 4 true leaves	600mL	To avoid possible crop damage DO NOT spray outside the early tillering to early jointing stage. Caution: DO NOT use this product where the land to be treated will be sown to lupins or peas the following year or where a volunteer medic or subclover pasture is required in the following season. Only use when a cereal crop will follow the cereal crop to be treated.
		Capeweed Doublegee Saffron thistle Turnip weed Wild mustard Wild turnip	Young rosette or seedling plants up to 6 true leaves	750mL	
		Wireweed	Up to 4 leaf		
	Apply from early to mid-tillering.	Docks Sorrel	Active growth	1L	

NOT TO BE FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

WITHHOLDING PERIODS:

DO NOT GRAZE OR CUT CROPS OR PASTURES FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

HARVEST: NOT REQUIRED WHEN USED AS DIRECTED.

MINIMUM RECROPPING PERIODS

Picloram, one of the active constituents in this product, remains active in the soil for extended periods depending on the rate of application, soil type, rainfall, temperature, humidity, soil moisture and soil organic matter.

DO NOT plant susceptible broadleaf crops within 12 months of applying product. Cereal crops and grasses can be sown safely after using Trooper for in-crop weed control.

GENERAL INSTRUCTIONS:

MIXING

Trooper can be mixed with water only
Mix only sufficient chemical for each days use and avoid storing mix. Half fill the spray tank with water and add the required quantity of Trooper and complete filling. Agitate continuously to ensure thorough mixing before and during application.

Tank mixtures: Wettable powder or dry flowable formulations (e.g. water dispersible granules) should be added to the spray tank first, followed by suspension concentrates (flowables), water soluble salts and then emulsifiable concentrate formulations. Add spraying oils and surfactants (wettors) last, if required.

COMPATIBILITY

Trooper is compatible with the following:
(Read and follow all label directions, restraints, plant-back periods, withholding periods and safety directions on the partner label as well as those on the Trooper label).

Broadleaf Herbicides

Eclipse* Herbicide	Archer Herbicide
Nufarm MCPA 250	Nufarm LVE MCPA
Brushkiller™/Associate®	Tomigan 200EC Herbicide
Amicide® 625	

Grass Herbicides

Nugrass® (annual ryegrass only)
Topik* 240EC (wild oats and phalaris only)

Adjuvants

Chemwet 1000 (when mixed with metsulfuron-methyl)
Impel™ Spray Adjuvant (when mixed with Topik* 240EC)

Insecticides

Lemat* Nufarm Dimethoate

Trooper is not compatible with zinc products (such as Zinc dextrase and Zinc heptahydrate), copper salts (such as sulphate) and manganese sulphate. Do not use with hard water or water clarified with alum.

APPLICATION METHODS and WATER RATES

A. Ground application (Boom)

Apply Trooper with an accurately calibrated boom sprayer, in at least 50L/ha water.
Flat fan nozzles are recommended using pressures in the range 200 to 300kPa.
Set the boom at a height to ensure a double overlap of the nozzle pattern.

B. Aerial Application

Apply in a minimum volume of 35L/ha water
Use equipment calibrated to produce droplets with an average diameter (Volume Mean Diameter) of 200-250 microns.
DO NOT apply when the temperature is above 30°C, when there is no wind or when the wind is blowing toward susceptible crops.

CLEANING SPRAY EQUIPMENT

Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto wasteland away from desirable plants and water courses.

Rinsing: After using Trooper, empty the tank completely and drain the whole system. Thoroughly wash inside the spray unit using a pressure hose. Drain, and clean any filters in the tank, pump, lines, hoses and nozzles.

After cleaning the tanks as above, quarter fill with clean water and circulate through the pump, lines and nozzles. Drain and repeat the rinsing procedure twice.

Decontamination (before spraying cotton and other sensitive crops; see PROTECTION OF CROPS):

Wash the tank and rinse the system as above. Then quarter fill the tank and add an alkali detergent (eg. liquid SURF* OMO* or DRIVE*) at 500mL/100L of water or the powder equivalent at 500g/100L and circulate throughout the system for at least 15 minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain.

RESISTANT WEEDS WARNING

GROUP I HERBICIDE

Trooper Herbicide contains members of the pyridine and phenoxy groups of herbicides. The product has the disrupters of plant cell growth mode of action. For weed resistance management the product is a Group I Herbicide.

Some naturally occurring weed biotypes resistant to Trooper and other Group I herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by Trooper or other Group I herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Nufarm Australia Limited accepts no liability for any losses that may result from the failure of this product to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department or Agriculture, or Nufarm Australia Limited representative.

**PROTECTION OF CROPS, NATIVE AND OTHER
NON-TARGET PLANTS.**

DO NOT use on land to be cultivated for growing susceptible crops within 12 months of applying Trooper. Legumes, vines, vegetables, cotton, tomatoes, ornamentals and many other plants are highly susceptible to Trooper during both growing and dormant periods. Cereal crops and grasses can be sown after using Trooper

Trooper will kill legumes (clovers, medics) present in the crop at the time of spraying. In the season following application of Trooper the regeneration or establishment of sensitive legumes (clover, medics, peas, lupins) may be adversely affected by soil residues.

Cereal crops may be reduced in height following use of Trooper. This height reduction is a normal response and does not represent any yield loss.

DO NOT allow spray to drift onto susceptible crops, such as cotton, tomatoes, vines, fruit, potatoes, vegetables, ornamentals, tobacco, lupins and other legumes, safflower, sugar beet, hops, flowers or shade trees. DO NOT use under meteorological conditions or with spraying equipment likely to produce drift. Minimise spray drift by using low pressures and nozzles which DO NOT give a fine droplet size.

DO NOT apply close to or on areas containing roots of desirable vegetation, where treated soil may be washed to areas growing, or to be planted to desirable plants, or on sites where surface water from heavy rain can be expected to run off to areas containing or to be planted to susceptible crops or plants.

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* Other trademarks