

# POISON

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

# Pantera®

Selective Herbicide

ACTIVE CONSTITUENT: 120 g/L QUIZALOFOP-P-TEFURYL  
SOLVENT: 679 g/L HYDROCARBON LIQUID

## GROUP A HERBICIDE

**For control of certain grass weeds in broadleaf crops as per directions for use table.**

IMPORTANT: READ THOROUGHLY BEFORE USING

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### DIRECTIONS FOR USE:

#### RESTRAINTS:

DO NOT apply to crops that are stressed by any cause (such as severe cold weather, disease, drought or waterlogging).  
DO NOT apply to weeds that are stressed by any cause (such as weather conditions, drought, waterlogging) or not actively growing.  
Grass weeds under stress frequently become less susceptible to herbicide activity. This may result in an incomplete kill or suppression of weeds only.  
DO NOT apply under conditions of high temperature and low humidity.  
DO NOT apply if rainfall is expected within 3 hours.  
DO NOT apply less than 50 L prepared spray/ha.

#### BOOM SPRAYING: WINTER GROWING WEEDS: ALL STATES

Crop	Weeds Controlled	Weeds Stage	Rate/ ha	Withholding Period		Critical Comments
				Harvest	Grazing	
Beetroot	Annual Ryegrass ( <i>Lolium rigidum</i> ) Brome Grasses ( <i>Bromus</i> spp.)	3 leaf to early tillering	300mL or 375mL	14 days	-	Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering.*
Cabbage				9 weeks	-	
Canola <sup>2</sup>	Barley Grass ( <i>Hordeum</i> spp.) Volunteer Barley Volunteer Wheat	3 leaf to early tillering	250mL	11 weeks	4 weeks	Apply when weeds are actively growing.*
Carrots				10 weeks	-	
Cauliflower	Wild Oats ( <i>Avena</i> spp.)	3 leaf to mid tillering	125mL or 250mL	14 days	-	Apply when weeds are actively growing. Use a lower rate only under light weed pressure and/or when are at the 1-3 leaf stage. Use higher rate under heavy weed pressure and/or when weeds are tillering. The higher rate will give better or more reliable control.*
Chickpeas				12 weeks	4 weeks	
Clover and Sub Clover Pasture				-	14 days	
Cucumbers <sup>1</sup>				14 days	-	
Faba Beans <sup>3</sup>				12 weeks	4 weeks	
Field Peas				9 weeks	4 weeks	
Honey Dew Melons*				9 weeks	-	
Lentils				12 weeks	4 weeks	
Lucerne				-	4 weeks	
Lupins <sup>4</sup>				6 weeks	4 weeks	
Medic Pasture				-	14 days	
Mung Beans				12 weeks	4 weeks	
Navy Beans				12 weeks	4 weeks	
Onions				18 weeks	-	
Potatoes				10 weeks	-	
Pumpkins <sup>1</sup>				9 weeks	-	
Radish				21 days	-	
Tomatoes				4 weeks	-	
Vetch				12 weeks	4 weeks	

\*ALWAYS ADD A SURFACTANT/WETTING AGENT AT THE RECOMMENDED RATE - SEE SECTION ON "USE OF SURFACTANT/WETTING AGENT" FOR DETAILS.

- IMPORTANT: DO NOT APPLY PANTERA BEFORE THE FIVE TRUE LEAF STAGE OF THE CROP.
- PANTERA MAY BE APPLIED TO CANOLA PRIOR TO BUD FORMATION AND STEM ELONGATION AND AFTER POD FORMATION.
- DO NOT APPLY PANTERA AFTER POD FORMATION.
- DO NOT APPLY PANTERA TO LUPINS AFTER 10% OF PODS ARE FORMED.

#### BOOM SPRAYING: SUMMER GROWING WEEDS: ALL STATES

Crop	Weeds Controlled	Weeds Stage	Rate/ha	Withholding Period		Critical Comments
				Harvest	Grazing	
Beetroot	Awnless Barnyard Grass ( <i>Echinochloa colona</i> ) Barnyard Grass ( <i>Echinochloa crus-galli</i> )	3 leaf to early tillering	500mL or 750mL	14 days	-	Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering.*
Cabbage				9 weeks	-	
Cauliflower	Couch Grass ( <i>Cynodon dactylon</i> )	2-4 leaf seedling	500mL	14 days	-	Apply when weeds are actively growing. This rate will only control seedling Couch Grass which is less than 2 months old and established from seed.*
Carrots	Dinebra ( <i>Dinebra retroflexa</i> )	3 leaf to early tillering	250mL or 376mL	10 weeks	-	Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering.*
Cucumbers <sup>1</sup>	Crowsfoot Grass ( <i>Eleusine indica</i> )	2 leaf to early tillering	500mL	14 days	-	Apply when weeds are actively growing.*
Green Beans	Foxtail Millet ( <i>Setaria italica</i> )	2 leaf to early tillering	250mL to 500mL	5 weeks	4 weeks	Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering.*
Honey Dew Melons*	Columbus Grass ( <i>Sorghum x alnum</i> )	2 leaf to 3 leaf tiller	500mL or 750mL	9 weeks	-	
Lucerne	Johnson Grass ( <i>Sorghum halepense</i> )			-	4 weeks	
Mung Beans	Liverseed Grass ( <i>Urochloa panicoides</i> )			12 weeks	4 weeks	
Navy Beans	Rhodes Grass ( <i>Chloris gayana</i> ) Stink Grass ( <i>Eragrostis ciliaris</i> )	3 leaf to early tillering	250mL to 500mL	12 weeks	4 weeks	
Onions				18 weeks	-	
Peanuts	Queensland Blue Grass ( <i>Dichanthium sericeum</i> )	3 leaf to early tillering	500mL	11 weeks	11 weeks	Apply when weeds are actively growing.*
Potatoes	Summer Grass ( <i>Digitaria ciliaris</i> )	3 leaf to early tillering	500mL to 1000mL	10 weeks	-	Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering.*
Pineapples				7 days	-	
Pumpkins <sup>1</sup>				9 weeks	-	
Radish				21 days	-	
Soybeans				12 weeks	4 weeks	
Sunflower				9 weeks	11 weeks	
Tomatoes				4 weeks	-	

\*ALWAYS ADD A SURFACTANT/WETTING AGENT AT THE RECOMMENDED RATE - SEE SECTION ON "USE OF SURFACTANT/WETTING AGENT" FOR DETAILS.

- IMPORTANT: DO NOT APPLY PANTERA BEFORE THE FIVE TRUE LEAF STAGE OF THE CROP.

#### HANDGUN SPRAYING: ALL STATES

Crop	Weeds Controlled	Weeds Stage	Rate/ 100L	Withholding Period		Critical Comments
				Harvest	Grazing	
Beetroot	Awnless Barnyard Grass ( <i>Echinochloa colona</i> ) Crowsfoot Grass ( <i>Eleusine indica</i> )	3 leaf to early tillering	125mL	14 days	-	Apply when weeds are actively growing. Use minimum of 800L of prepared spray/ha. Thoroughly wet target weeds (especially well established clumps) without causing run off. Repeated spraying may be necessary for perennial grass species.
Cabbage				9 weeks	-	
Cauliflower	Paspalum ( <i>Paspalum dilatatum</i> )	Seedling to established clumps	125mL	14 days	-	
Canola <sup>2</sup>	Johnson Grass ( <i>Sorghum halepense</i> )	Seedling 2 leaf to early tillering Rhizome 2 leaf to early tillering	125mL 250mL	11 weeks	4 weeks	Always add a surfactant/wetting agent at the recommended rate - see section on "Use of Surfactant/Wetting agent" for details.
Carrots	Kikuyu ( <i>Pennisetum clandestinum</i> )	Seedling to established plants	250mL	10 weeks	-	
Chickpeas				12 weeks	4 weeks	
Clover and Sub Clover Pasture				-	14 days	
Cucumbers <sup>1</sup>				14 days	-	
Faba Beans <sup>3</sup>				12 weeks	4 weeks	
Field Peas				9 weeks	4 weeks	
Grapes				-	-	
Green Peas				5 weeks	4 weeks	
Honey Dew Melons*				9 weeks	-	
Lentils				12 weeks	4 weeks	
Lucerne				-	4 weeks	
Lupins <sup>4</sup>				6 weeks	4 weeks	
Medic Pasture				-	14 days	
Mung Beans				12 weeks	4 weeks	
Navy Beans				12 weeks	4 weeks	
Non crop				-	-	
Onions				18 weeks	-	
Peanuts				11 weeks	11 weeks	
Pineapples				7 days	-	
Potatoes				10 weeks	-	
Pumpkins <sup>1</sup>				9 weeks	-	
Radish				21 days	-	
Soybeans				12 weeks	4 weeks	
Sunflower				9 weeks	11 weeks	
Tomatoes				4 weeks	-	
Vetch				12 weeks	4 weeks	

- IMPORTANT: DO NOT APPLY PANTERA BEFORE THE FIVE TRUE LEAF STAGE OF THE CROP.
- PANTERA MAY BE APPLIED TO CANOLA PRIOR TO BUD FORMATION AND STEM ELONGATION AND AFTER POD FORMATION.
- DO NOT APPLY PANTERA AFTER POD FORMATION.
- DO NOT APPLY PANTERA TO LUPINS AFTER 100% OF PODS ARE FORMED.

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

#### WITHHOLDING PERIOD

#### HARVEST

**BEETROOT, CAULIFLOWER, CUCUMBERS: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.**  
**CABBAGE, FIELD PEAS, HONEY DEW MELON, PUMPKINS, SUNFLOWERS: DO NOT HARVEST FOR 9 WEEKS AFTER APPLICATION.**  
**CARROTS, POTATOES: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 10 WEEKS AFTER APPLICATION.**  
**CHICKPEAS, FABA BEANS, LENTILS, MUNG BEANS, NAVY BEANS, SOYBEANS, VETCH: DO NOT HARVEST FOR 12 WEEKS AFTER APPLICATION.**  
**CANOLA, PEANUTS: DO NOT HARVEST FOR 11 WEEKS AFTER APPLICATION.**  
**GREEN BEANS, GREEN PEAS: DO NOT HARVEST FOR 5 WEEKS AFTER APPLICATION.**  
**ONIONS: DO NOT HARVEST FOR 18 WEEKS AFTER APPLICATION.**  
**PINEAPPLES: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.**  
**RADISH: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.**  
**TOMATOES: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.**

#### GRAZING

**CANOLA, CHICKPEAS, LENTILS, GREEN PEAS, FIELD PEAS, FABA BEANS, MUNG BEANS, NAVY BEANS, GREEN BEANS, LUCERNE, LUPINS, SOYBEANS, VETCH: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 4 WEEKS AFTER APPLICATION.**

**MEDIC PASTURES (EXCEPT LUCERNE), CLOVER AND SUBCLOVER: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 14 DAYS AFTER APPLICATION.**

**SUNFLOWERS, PEANUTS: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 11 WEEKS AFTER APPLICATION.**

#### RE-ENTRY

**DO NOT ALLOW ENTRY INTO TREATED AREAS FOR 12 HOURS AFTER TREATMENT. WHEN PRIOR ENTRY IS NECESSARY, WEAR COTTON OVERALLS BUTTONED TO THE NECK AND WRIST AND WASHABLE HAT AND CHEMICAL RESISTANT GLOVES. CLOTHING MUST BE LAUNDERED AFTER EACH DAY'S USE.**

Size Folded: 100mm deep x 140mm wide  
Size Flat: 700mm deep x 140mm wide 54.7%

## GENERAL INSTRUCTIONS

Pantera® is an emulsifiable concentrate herbicide used post emergence for the control of certain grass weeds in specific broadleaf crops.

Pantera® is a systemic herbicide, which is rapidly absorbed and readily translocated from the treated foliage to the root system and growing points of the plant. Application made to grass weeds stressed due to insufficient moisture or cold temperatures may result in unsatisfactory control.

## RESISTANT WEEDS WARNING

GROUP **A** HERBICIDE

Pantera® Selective Herbicide is a member of the "Fop" group of herbicides. Pantera® herbicide has the inhibitors of acetyl coA carboxylase mode of action. For weed resistance management Pantera® is a Group A herbicide.

Some naturally occurring weed biotypes resistant to Pantera® Selective Herbicide and other inhibitors of acetyl coA carboxylase 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 Pantera® herbicide and other inhibitors of acetyl coA carboxylase. Since the occurrence of resistant weeds is difficult to detect prior to use, Chemtura Australia Pty Ltd accepts no liability for any losses that may result from the failure of Pantera® herbicide to control resistant weeds.

Strategies to minimise the risk of herbicide resistance are available. Consult your farm chemical supplier, consultant, local Department of Agricultural or Primary Industries, or local Chemtura Australia Pty Ltd Representative.

## TIME OF APPLICATION

For maximum benefit, weeds should be sprayed when young and actively growing. Application may be made at any stage of crop growth (except to cucurbit crops), but sufficient time must be allowed for the prescribed holding period to expire before harvest and/or grazing or cutting for stockfeed.

**Important: DO NOT apply Pantera® to cucurbit crops before the five true leaf stage.**

## SPRAY APPLICATION

Pantera® is an emulsifiable concentrate to be mixed with water and applied with a spray. Add the amount directly to the spray tank and mix well. If tank mixing with Benlate® or Mancozeb, add these to the spray tank and mix thoroughly PRIOR to adding Pantera.

## USE OF SURFACTANT/WETTING AGENT

Pantera may be used with either of the following adjuvant systems:

1. A non-ionic surfactant (1000g ac/L strength eg. Chemwet 1000) at 0.1% v/v and a mineral spray oil at 1% v/v.
2. A non-ionic surfactant (1000g ac/L strength eg. Chemwet 1000) at 200mL/100L of final spray volume (ie. 0.2% volume/volume).

For Pantera and Pantera® tank mixes with Sertin<sup>D</sup> 186EC, Sertin<sup>D</sup> Plus and Select<sup>®C</sup> the recommended mixture is 100mL non-ionic surfactant + 1L DC-TRATE<sup>G</sup> Spray Oil per 100 Litres of final spray volume. This adjuvant system provides a more robust treatment and is strongly recommended. DO NOT use the surfactant + mineral oil adjuvant system on vegetable crops, use a surfactant only. DO NOT use spray oils of crop origin (eg. Codacide oil, Synetrol oil) as spray adjuvants.

## COMPATIBILITIES

Pantera® is compatible with the Insecticides Decis<sup>D</sup> Le Mat<sup>®D</sup>/Comrad<sup>H</sup>, Rogor<sup>®E</sup>(dimethoate), Lannate<sup>®A</sup> L (methomyl), endosulfan, the fungicides Benlate<sup>®</sup> WP, and Mancozeb and the herbicides Brodal<sup>®D</sup> and Lontrel<sup>®F</sup>/Archer<sup>H</sup> (clopyralid) when using the surfactant only adjuvant system.

Pantera® is compatible with Sertin<sup>D</sup>, Sertin<sup>D</sup> Plus and Select<sup>®C</sup> when using the surfactant plus spray oil adjuvant system. When mixing Pantera® and broadleaf herbicides DO NOT use a spray oil, use a surfactant only.

Application of the Pantera®/Brodal<sup>®D</sup> tank mix may result in crop effects. The effect is temporary and usually appears yellow or white bleaching on the leaves. New growth and subsequent yield, however will not be affected.

DO NOT add crop oil to tank mixtures Pantera®/Brodal<sup>®D</sup>.

To minimise crop effects:- Apply Pantera®, a maximum of 5 days prior to Brodal<sup>®D</sup> application (14-21 days if weeds have been stressed).

## GROUND SPRAY

Use sprayers with flat fan or hollow cone nozzles at 210-350 kPa to give an even distribution of droplets no less than 50% of the spray volume in the 150-300 micron range. 110<sup>0</sup> flat fan nozzles are preferred. Use between 50 and 100 Litres of prepared spray/ha, the higher spray volume gives more reliable results. If weeds are large and the crop canopy is dense, increase to 150 Litres prepared spray/ha.

For proper spray coverage adjust the boom and nozzle height according to the specifications listed by the nozzle manufacturer.

Ensure the spray is evenly distributed and a double overlap pattern is obtained.

Avoid overlapping boomspray widths and shut off spray booms when starting, turning, slowing or stopping.

## EXPORT OF TREATED PRODUCE

Growers should note that suitable MRL's or import tolerances may not have been established in all markets for produce treated with Pantera®. If you are growing produce for export, please check with

Chemtura Australia Pty Ltd for the latest information on MRL's and import tolerances before using Pantera®.

## PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Do not apply under weather conditions, or from spraying equipment that may cause spray to drift on to nearby susceptible plant/crops, cropping lands or pastures. DO NOT plant cereal crops into the treated area for a period of 18 weeks after application of Pantera®.

## SPRAYER CLEANUP

Thoroughly clean all traces of Pantera® from application equipment immediately after use. Flush tank, pump, hoses and boom with several changes of water after removing nozzle tips and screens (clean those parts separately). Failure to thoroughly clean the equipment may result in injury to subsequently sprayed cereal and grass crops.

If spray equipment has previously been used for the application of sulfonyurea herbicides eg. Ally<sup>®A</sup>/Associate<sup>H</sup>, Harmony<sup>®AM</sup>, Glean<sup>®A</sup>/Siege<sup>®A</sup>, Logran<sup>®B</sup>/Nugran<sup>®B</sup>, ensure that the recommended sprayer cleanup procedure for the product previously sprayed has been followed before using the equipment for the application of Pantera®.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEA AND ENVIRONMENT

DO NOT contaminate dams, rivers or streams with the product or used container.

## STORAGE AND DISPOSAL

### 1L, 5L, 10L and 20L pack size

Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT store tank-mixes of Pantera® with other materials. When storing, keep from contact with fertilisers, fungicides and seeds. 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 products should not be burnt.

### Envirodrum 110L Mini Bulk Returnable Container:

Store the original sealed Envirodrum in a cool, well ventilated area. Do not store for prolonged period in direct sunlight. Do not tamper with the Micro Matic valve or the security seal. Do not contaminate the Envirodrum with water or any other 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 content of the Envirodrum have been used, return the empty Envirodrum to the point of purchase. The envirodrum remains the property of Chemtura Australia Pty Ltd.

## SAFETY DIRECTIONS

Will damage eyes. Will irritate the nose, throat and skin. Avoid contact with skin. DO NOT inhale vapour. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist, and a washable hat, elbow length PVC gloves, goggles and disposable fume face mask covering mouth and nose. When using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow length PVC gloves. If product in eyes, wash it out immediately with water. Wash hands after use. 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

Chemtura Australia Pty Ltd will not accept any responsibility whatsoever and howsoever arising and whether for consequential loss or otherwise in connection with the supply or use of these goods other than responsibility for the merchantable quality of the goods and such responsibilities mandatorily imposed by Statutes applicable to the sale or supply of these goods. To the extent allowed by such Statutes the liability of Chemtura Australia Pty Ltd is limited to the replacement of the goods or (at the option of Chemtura Australia Pty Ltd) the refund of the price paid and is conditional upon a claim being made in writing and where possible sufficient part of the goods to enable proper examination being returned to Chemtura Australia Pty Ltd within thirty days of delivery.

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Registered Trademarks

- A. Dupont
- B. Syngenta
- C. Arysta
- D. Bayer
- E. Montecatini
- F. Dow AgroSciences
- G. Caltex
- H. Nufarm

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**In case of emergency:**  
**Phone 1800 033 111**

Ask for shift supervisor. Toll free 24 hours.

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Size Folded: 100mm deep x 140mm wide

Size Flat: 700mm deep x 140mm wide 54.7%