

Smart Tola 960

CAUTION

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

HERBICIDE

ACTIVE CONSTITUENT: 960 g/L METOLACHLOR

Group **15** Herbicide

For the Control of Certain Annual Grasses and Broadleaf Weeds in
Certain Crops as specified in the Directions for Use



**IMPORTANT: READ THE ATTACHED LEAFLET
BEFORE OPENING OR USING THIS PRODUCT**

Crop Smart
better crop protection

DIRECTIONS FOR USE

Crops	Weeds Controlled	State	Rate	Critical Comments	
Barley, Oats	Suppression of Annual Ryegrass	NSW, ACT, Vic, Tas, SA, WA only	565 - 750 mL/ha	Apply to moist soils immediately after planting and before crop and weeds emerge. Use the lower rate on light soils. Application should be made to a moist seedbed and sufficient rain to thoroughly wet the top 3 to 4cm of soil should occur within 10 days after spraying. Damage may occur if crop is sown too shallow (less than 4cm). Damage can occur on light sandy soil types after heavy rain. See General Instructions for use in zero-tillage systems.	
Wheat, Barley, Oats, Triticale	Toad Rush	Vic, NSW, ACT, SA, Tas, WA only	225 to 375 mL/ha	Apply at or immediately after planting and before crop and weeds emerge. Application should be made to a moist seedbed and sufficient rain to thoroughly wet the top 3 to 4cm of soil should occur within 10 days after spraying. Use rates towards the higher end of the range in wet areas or when longer residual control is required or in situations where crop competition is minimal. When mixed with Triasulfuron 750 apply pre-sowing and incorporate by sowing operation (for wheat only).	
Broccoli, Brussels sprouts, Cabbages, Cauliflowers	Barnyard Grass, Blackberry Nightshade, Chickweed (suppression), Deadnettle, Fat-hen, Lovegrass, Pigeon Grass, Pigweed (suppression), Potato Weed, Shepherds Purse, Stinging Nettle, Summer Grass, Wireweed (suppression)	NSW, ACT, Vic, Qld, Tas, NT only	2.25 to 3 L/ha	Apply immediately after transplanting. Sufficient irrigation to wet the top 3 to 4cm of soil should be applied within 24 hours. Use rates towards the higher end of the range where Blackberry Nightshade, Chickweed, Fat-hen, Lovegrass, Pigeon Grass, Pigweed, Potato Weed and Wireweed are the major problem. See warning – Brassica crops	
	Crowsfoot Grass, Fierce Thornapple (suppression), Liverseed Grass, Winter Grass	NSW & ACT only		Apply immediately after transplanting. Sufficient irrigation to wet the top 3 to 4cm of soil should be applied within 24 hours. Use rates towards the higher end of the range where Apple of Peru, Common Sowthistle, Fierce Thornapple, Liverseed Grass, Redroot Amaranth, Twiggy Turnip and Nettleleaf Goosefoot are the major problems. WARNING: Qld, only stunting and reduced yield may occur in broccoli in red soils and light alluvial soils.	
	Apple of Peru, Awnless Barnyard Grass, Fierce Thornapple (suppression) Liverseed Grass, Yellow Weed, Redroot Amaranth (suppression)	Qld only		Vic, Tas only	See Warning – Brassica crops
	Annual Ryegrass, Common Cotula, Common Sowthistle (suppression), Crowsfoot Grass, Fiddle Dock, Italian Ryegrass, Liverseed Grass, Nettle leaf Goosefoot (suppression), Twiggy Turnip (suppression), Winter Grass.				
Canola	Toad Rush	NSW, ACT, SA, Vic, Tas Qld only	225 to 375 mL/ha	Apply at or immediately after planting and before crops and weeds emerge. Apply to moist soil; use rates towards the higher end of the range where longer residual control is required.	
	Toad Rush	WA Only		Apply before crops and weeds emerge. Apply to moist soil. To avoid crop injury use rates towards the lower end of the range on light sandy soils.	
Cotton	Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrass, Pigeon Grass,	NSW, WA, Qld only	1.5 L/ha	Pre-emergent. Apply before, at, or immediately after planting and before crops and weeds have germinated using a low volume boom sprayer applying 60 to 120 litres of mixture per hectare.	

Crops	Weeds Controlled	State	Rate	Critical Comments
	Summer Grass, Wandering Jew			<p>Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4cm of soil. If rain does not occur or irrigation is unavailable incorporate chemical to a depth of 3 to 4cm. Use rates towards the higher end of the range on heavy soils or where a heavy grass population is expected.</p> <p>DO NOT throw untreated soil onto treated areas, as this will reduce weed control.</p> <p>DO NOT use on soils where the sand content exceeds 70%. Use lower rate where the sand content of the soil is within the range 50% to 70%.</p> <p>See Warning – Cotton</p>
Green Beans, Navy Beans	Black Berry Nightshade, Common Sowthistle, Fat-hen, Potato Weed, Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrass, Pigeon Grass, Summer Grass and suppression of Pigweed.	NSW, ACT, Qld, Vic, SA only	2.25 to 3 L/ha	<p>Pre-emergent. Apply before, at or immediately after planting and before crops and weeds have germinated.</p> <p>Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4cm of soil. If rain does not occur or irrigation is unavailable incorporate chemical to a depth of 3 to 4cm.</p> <p>DO NOT throw untreated soil onto treated areas, as this will reduce weed control.</p>
	Powell's Amaranth	Tas only	3 L/ha	<p>Pre-emergent. Apply before, at or immediately after planting and before crops and weeds have germinated.</p> <p>For sufficient Amaranth control the Smart Tola 960 Herbicide application should be followed by 1 L/ha bentazone (480 g/L) (2 leaf Amaranth) plus 2L/ha bentazone (480 g/L) (4 leaf Amaranth).</p> <p>Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4cm of soil. If rain does not occur or irrigation is unavailable incorporate chemical to a depth of 3 to 4cm.</p> <p>DO NOT throw untreated soil onto treated areas, as this will reduce weed control.</p>
Maize (not Waxy Maize) Sweet Corn	Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrass, Pigeon Grass, Summer Grass, Wandering Jew.	NSW, ACT, Vic, Qld, SA, NT, Tas only	1.5 to 3 L/ha	<p>Pre-emergent. Apply before, at, or immediately after planting and before crops and weeds have germinated using a low volume boom sprayer applying 60 to 120 litres of mixture per hectare. Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4cm of soil. If rain does not occur or irrigation is unavailable incorporate chemical to a depth of 3 to 4cm. Use rates towards the higher end of the range on heavy soils or where a heavy grass population is expected.</p> <p>DO NOT throw untreated soil onto treated areas, as this will reduce weed control.</p> <p>DO NOT use on soils where the sand content exceeds 70%. Use lower rate where the sand content of the soil is within the range 50% to 70%.</p>
	Blackberry nightshade, Caltrop, Common Thornapple, Mintweed, Needle Burr, Noogoora Burr, Pigweed, Redroot Amaranth, Slim Amaranth		1.5 to 3 L plus 2.5 L of flowable atrazine (500 g/L) per ha	
	Toad Rush			

Crops	Weeds Controlled	State	Rate	Critical Comments
Pastures – Trikkala Sub-clover, Haifa white clover, Maral Persian clover, Paradana Balansa clover, Redquin red clover, Phalaris and Cocksfoot.		Vic, NSW, ACT, NT, SA only	300 to 375 mL/ha	Apply at or immediately after planting and before pasture species and weeds emerge. Application should be made to a moist seedbed. Sufficient rain to thoroughly wet the top 3 to 4cm of soil should occur within 10 days after spraying. Use rates towards the higher end of the range in wet areas or when longer residual control is required. DO NOT use in soils where prolonged waterlogging is anticipated otherwise unacceptable crop retardation will occur. Avoid damage to pasture species by avoiding overlaps and double spraying in headlands where White, Persian and Balansa clovers are sown and if the 375 mL rate is being used.
Peanuts	Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrass, Pigeon Grass, Summer Grass, Wandering Jew.	Qld, NSW, NT only	1.5 to 3 L/ha	Apply before pre-irrigation where soil crusting is likely. Apply before, at, or immediately after planting and before weeds germinate. Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4 cm of soil. If rain does not occur or irrigation is unavailable incorporate chemical to a depth of 3 to 4 cm. DO NOT throw untreated soil onto treated areas, as this will reduce weed control. Use rates towards the higher end of the range on heavy soils or where a heavy grass population is expected.
Soybeans, Sunflowers		NSW, ACT, Vic, Qld, SA, NT only		
Sorghum treated with Concep II Sorghum Seed Safener	Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrass, Pigeon Grass, Summer Grass, Wandering Jew	NSW, ACT, Qld, NT, only	1.5 to 3 L/ha	Pre-emergent. Apply before, at or immediately after planting and before crops and weeds have germinated using a low volume boom sprayer applying 60 to 120 litres of mixture per hectare. DO NOT apply to sorghum seed not previously treated with Concept II Sorghum Seed Safener. Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4 cm of soil. If rain does not occur or irrigation is unavailable incorporate chemical to a depth of 3 to 4 cm. Use rates towards the higher end of the range on heavy soils or where a heavy grass population is expected.
	Blackberry nightshade, Caltrop, Common Thornapple, Mintweed, Needle Burr, Noogoora Burr, Pigweed, Redroot Amaranth, Slim Amaranth		2 to 4 L/ha plus 2.5 L/ha of flowable atrazine (500 g/L)	DO NOT throw untreated soil onto treated areas, as this will reduce weed control. Use the lower rate on sandy soils.
Sugarcane (plant and ratoon)	Awnless Barnyard Grass, Barnyard Grass, Bellvine, Billygoat weed (Blue top), Blackberry Nightshade, Caltrop, Common Sowthistle, (Milk Thistle), Common Thornapple, Crowsfoot Grass, Green Summer Grass, Guinea Grass, Mexican Clover, Mintweed, Needle Burr, Passionfruit Vines, Pigeon Grass, Pigweed, Redroot Amaranth,	Southern Qld only (Bundaberg South)	1.65 to 2.175 L/ha plus 2.7 to 3.6 L/ha flowable atrazine (500 g/L) or 1.5 to 2 kg/ha atrazine (900 g/kg WG)	Apply as a pre-emergent or post-emergent application to crop. Apply once per year only. Application should be applied to a moist soil before weeds and grasses have germinated. If conditions remain dry for a period of 10 days after spraying, irrigation or shallow cultivation (2.5cm) may assist results. DO NOT throw untreated soil on to treated areas, as this will reduce weed control. In Southern Qld use rates toward the higher end of the range on heavy soils or where a high grass population is expected.

Crops	Weeds Controlled	State	Rate	Critical Comments
	Square Weed, Star of Bethlehem, Summer Grass, Wild Rose	Northern Qld (Mackay North)	2.175 to 2.7 L/ha plus 3.6 to 4.5 L/ha flowable atrazine (500 g/L) or 2 to 2.5 kg/ha atrazine (900 g/kg WG)	In Northern Qld, application must be made to moist soil and rainfall or irrigation should occur within 24 hours of application. Use rates towards the higher end of the range where high Green Summer Grass population is expected. Where broadleaf weeds and grasses have emerged, and are in the 2 to 4 true leaf stage, knockdown herbicides such as flowable Ametryn (500 g/L) at 2L/ha and a flowable diuron (500g/L) at 1L/ha or paraquat 250 at label rates, applied as a post directed spray, can be added. Where broadleaf weeds only have emerged, and are at the 2 to 4 true leaf stage then a 500g/L 2,4-D Amine at 2L/ha should be added. In all cases add a non-ionic surfactant. Follow all instructions and restrictions on the Atrazine labels.
Sweet Potatoes	Black Pigweed, Redshank, Potato Weed, Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrasses, Pigeon Grass, Summer Grass, Suppression of Evening Primrose	NSW, ACT, Qld, Vic, NT, SA only	2.25 L/ha	Pre-emergent. Apply immediately after transplanting before weeds have germinated. Sufficient irrigation to wet the soil through the weed zone should be applied within 24 hours. Further weed germination may occur following re-hilling due to exposure of untreated soil.
Tobacco (transplanted in field)	Barnyard Grass, Lovegrass, Pigeon Grass, Summer Grass, and suppression of Common Thornapple (<i>Datura stramonium</i>) and Nightshades (<i>Solanum sarrachoides</i> and <i>S.nigrum</i>)	Vic, NSW only	2.25 L/ha	Apply by low volume boom spray prior to transplanting and before weeds and grasses germinate. The seedbed should be fine and free of large clods. Thoroughly incorporate within 7 days of spraying using a rotary hoe or similar equipment set to work to a depth of 7.5cm. DO NOT use disc-cultivating implements. An even coverage of the herbicide is essential. The herbicide needs to be activated by moisture through to the top 3 to 4cm of soil at the time of application or within 4 days of incorporation. This can be achieved by applying to moist soil, irrigating soon after incorporation or irrigating immediately after transplanting. Avoid boom overlaps as double treatment may cause growth suppression. Temporary crop retardation may be observed when soil conditions remain dry after application or where black root rot may occur.

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

WITHHOLDING PERIODS

Canola:	DO NOT GRAZE TREATED FIELDS FOR 10 WEEKS AFTER APPLICATION
Green Beans:	DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 10 WEEKS AFTER APPLICATION
Pastures:	DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 13 WEEKS AFTER APPLICATION
Sweet Potatoes:	DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 23 WEEKS AFTER APPLICATION
Wheat, Barley, Oats, Triticale:	DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 8 WEEKS AFTER APPLICATION
Forage All Other Crops (Except For Sweet Potatoes):	DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 13 WEEKS AFTER APPLICATION

GENERAL INSTRUCTIONS

USES

The product is a short residual pre-emergent herbicide for the control of many important annual grasses and broadleaf weeds in the crops nominated. The product does not control the important broadleaf weeds in maize, sweet corn and Concept II treated sorghum, but when mixed with flowable atrazine (500 g/L) control of many important annual weeds and grasses is obtained without the problem of carryover of herbicides affecting succeeding crops. The product acts mainly through shoot (coleoptile) absorption. Its effectiveness depends on the occurrence of rainfall or irrigation to move it down into the top 3 to 4cm of soil, where it must be present at the time of weed germination.

MIXING

Add the required amount directly to the spray tank, fill with water and mix well.

COMPATIBILITY

Smart Tola 960 Herbicide is compatible with prometryn (500g/L), flowable atrazine (500 g/L), triasulfuron (750g/kg), paraquat (250g/L) and glyphosate.

WARNING – Cotton: DO NOT use when planting into dry soil or soil with marginal moisture. Under dry planting conditions heavy rain or flood irrigation soon after planting, together with below average soil temperatures, can result in crop injury due to the inability of the germinating seedling to metabolise above normal amounts of herbicide that may accumulate in the root zone as a result of accelerated capillary movement. Smart Tola 960 Herbicide should not be used in situations where these conditions are likely to occur.

WARNING – Brassica crops: Crop retardation may occur where Smart Tola 960 Herbicide is used on soils that have a low organic matter content and which contain more than 60% of fine sand and silt and less than 5% clay in the top 30 cm. On these soil types, use rates of Smart Tola 960 Herbicide towards the lower end of the rate range and apply onto moist soil. Irrigation after application should be limited to no more than 25mm.

Zero – Tillage (Canola, Barley, Oats, Wheat, Triticale): When sowing using knife points and zero-tillage and leaving a seeding slot, DO NOT apply post-seeding unless harrows (or similar) tilled-in the seedling slot before application. Alternatively, apply Smart Tola 960 Herbicide immediately before sowing.

DO NOT USE ON SOILS CONTAINING LESS THAN 5% CLAY IN THE TOP 30cm.
DO NOT USE MORE THAN ONCE PER YEAR.

RESISTANCE WEEDS WARNING

GROUP	15	HERBICIDE
-------	-----------	-----------

Smart Tola 960 Herbicide is a member of the amide group of herbicides. The product has the diverse sites of action mode of action. For weed resistance management this is Group 15 herbicide. Some naturally occurring weed biotypes resistant to Smart Tola 960 Herbicide and other group 15 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 Smart Tola 960 Herbicide or other group 15 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Crop Smart Pty Ltd. accepts no liability for any losses that may result from the failure of Smart Tola 960 Herbicide to control the resistant weeds.

Advice as to strategies and alternative treatments that can be used should be obtained from your local supplier, consultant, local Department of Agriculture, Primary Industries Department or a Crop Smart representative.

PRECAUTION

Re-entry Period

DO NOT enter treated area until spray has dried.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT plant crops other than maize, sweet corn, tobacco, cotton, soybeans, sunflowers, peanuts, broccoli, Brussels sprouts, cabbages, cauliflowers or Concep II treated sorghum within six months of application of Smart Tola 960 Herbicide.

DRIFT WARNING

DO NOT apply under weather conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

PROTECTION OF LIVESTOCK

Do not graze or cut sweet potato leaves for stock food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. DO NOT store for prolonged periods in direct sunlight. Triple 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 a designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

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

SAFETY DIRECTIONS

Avoid contact with eyes and skin. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If swallowed, DO NOT induce vomiting. Give a glass of water.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS) and is available from the supplier.

NOTICE TO BUYERS

Crop Smart Pty Ltd shall not be liable for any loss, injury, damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence, use under abnormal conditions 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 Crop Smart's skill or judgment in purchasing or using the product and every person dealing with this product does so at their own risk.

