



**Company Name:** SHANDONG RAINBOW INTERNATIONAL CO., LTD.  
**Product Name:** Terbupac Herbicide  
**APVMA Approval No:** 81541/103327

<b>Label Name:</b>	Terbupac Herbicide
<b>Signal Headings:</b>	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>Constituent Statements:</b>	ACTIVE CONSTITUENTS: 275g/L TERBUTRYN 160g/L MCPA PRESENT AS THE POTASSIUM SALT
<b>Mode of Action:</b>	GROUP <b>C I</b> HERBICIDE
<b>Statement of Claims:</b>	For the control of seedling broadleaf weeds in wheat, barley, some varieties of oats, pasture and sugar cane as specified in the directions for use table.
<b>Net Contents:</b>	1L, 5L, 10L, 20L, 110L, 200L and 1000L
<b>Restraints:</b>	RESTRAINTS: DO NOT apply to crops undersown with legumes. DO NOT spray if weeds are wilted by dry or cold weather. DO NOT spray if rain is expected within 6 hours. DO NOT spray cereals or pastures on days when the temperature is greater than 22°C. DO NOT add a wetting agent or a spraying oil for use in cereals or pasture.
<b>Directions for Use:</b>	This section contains file attachment. <b>File Name:</b> DIRECTIONS FOR USE.pdf <b>File Size:</b> 89041 bytes
<b>Other Limitations:</b>	

<b>Withholding Periods:</b>	<p>WITHHOLDING PERIOD: DO NOT GRAZE BARLEY, WHEAT, OATS OR PASTURE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION. DO NOT APPLY THE TANK MIX OF TERBUPAC HERBICIDE AND AMETRYN 500g/L LATER THAN 9 MONTHS BEFORE HARVEST.</p>
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<b>Trade Advice:</b>	
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<b>General Instructions:</b>	<p>This section contains file attachment. <b>File Name:</b> GENERAL INSTRUCTIONS.pdf <b>File Size:</b> 43054 bytes</p>
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<b>Resistance Warning:</b>	<p>Terbupac Herbicide is a member of both the triazines and phenoxy's groups of herbicides. Terbupac Herbicide has the inhibitor of photosynthesis at photosystem II and disruptor of plant cell growth modes of action. For weed resistance management Terbupac Herbicide is a group C and I herbicide. Some naturally occurring weed biotypes resistant to Terbupac Herbicide and other group C or 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 Terbupac Herbicide or other inhibitors of photosynthesis at photosystem II, or disruptor of plant cell growth herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Shandong Rainbow International Co., Ltd accepts no liability for any losses that may result from the failure of Terbupac Herbicide to control resistant weeds.</p>
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<b>Precautions:</b>	
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<b>Protections:</b>	<p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND THE ENVIRONMENT Dangerous to fish. DO NOT contaminate streams, rivers, or waterways with the chemical or used containers.</p> <p>PROTECTION OF CROPS, NATIVE AND OTHER NONTARGET PLANTS 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. Avoid spray drift onto susceptible crops such as cotton, tobacco, tomatoes, vines, lupins, fruit trees and ornamentals.</p>
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<b>Storage and Disposal:</b>	<p>STORAGE AND DISPOSAL Store in the closed, original container in a cool, well ventilated locked area away from children, animals, food, feedstuffs, seed and fertilizers. Do not store for prolonged periods in direct sunlight.</p> <p>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.</p> <p>If not recycling, break, crush, or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm 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.</p>
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For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

**Safety Directions:**

**SAFETY DIRECTIONS**

Harmful if swallowed. Attacks eyes. Will irritate the skin. Avoid contact with skin. Repeated exposure may cause allergic disorders. When preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and washable hat, elbow-length PVC gloves and goggles. If product in eyes, wash it out immediately with water. 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 Instructions:**

**FIRST AID**

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

**First Aid Warnings:**

**DIRECTIONS FOR USE:**

CROP	WEEDS CONTROLLED	STATE	RATE	CRITICAL COMMENTS
Wheat, Barley and certain oat varieties†	Australian Crassula ( <i>Crassula sieberana</i> ), Cape Weed ( <i>Arctotheca calendula</i> ), Charlock ( <i>Sinapis arvensis</i> ), Fumitory-Red ( <i>Fumaria densiflora</i> ), Fumitory-White ( <i>Fumaria parviflora</i> ), Indian Hedge Mustard ( <i>Sisymbrium orientale</i> ), Melilotus/Hexam Scent ( <i>Melilotus indica</i> ), Paterson's Curse ( <i>Echium plantagineum</i> ), Rough Poppy ( <i>Papaver hybridum</i> ), Rounded Chamomile ( <i>Matricaria matricarioides</i> ), Sheepweed/ Corn Gromwell ( <i>Buglossoides arvensis</i> ), Turnip Weed ( <i>Rapistrum rugosum</i> ), Wards Weed ( <i>Carrichtera annua</i> ), Wild Turnip ( <i>Brassica tournefortii</i> ), Yellow Burr Weed ( <i>Amsinckia spp.</i> )	NSW, Vic, SA & WA only	1 L	Spray actively growing weeds at the 2 to 6 leaf stage when cereals have 3 to 5 leaves on the main stem, i.e. Zadok scale code Z 13-15.  Ensure yellow burr weed plants are at the 2 to 6 leaf stage. If plants are older than this use the higher rate. DO NOT spray this weed after the 12 leaf stage.
	Fat-hen ( <i>Chenopodium album</i> ), Scented Woolly Sage ( <i>Salvia lanigera</i> )	SA & WA only		
	Ball Mustard* ( <i>Neslia paniculata</i> ), Deadnettle ( <i>Lamium amplexicaule</i> ), Mallee Catchfly ( <i>Silene apetala</i> ), Pimpernel ( <i>Anagallis arvensis</i> ), Speedwell-Ivyleaf ( <i>Veronica hederifolia</i> ), Three cornered Jack/ Spiny Emex/ Doublegee ( <i>Emex australis</i> ), Toadrush ( <i>Juncus bufonis</i> ), Wireweed ( <i>Polygonum aviculare</i> )	NSW, Vic, SA & WA only	1.5L	Spray actively growing weeds at the 2 to 6 leaf stage when cereals have 3 to 5 leaves on the main stem, i.e. Zadok scale code Z 13-15. For Threecornered Jack apply at the 1 to 4 true leaf stage. Control of Ivyleaf Speedwell may at times be variable.
	Saffron Thistle <i>Carthamus lanatus</i> Stemless Thistle <i>Onopordum acaulon</i>	SA & WA only		
Pastures Use on Sub. Clover (min. 1 trifoliolate leaves) based pasture with either/or Ryegrass, Phalaris, Cocksfoot (grasses min. 2 leaves)	Paterson's Curse ( <i>Echium plantagineum</i> ) (cotyledon to 2 leaf)	NSW, Vic, SA & WA only	300mL to 500mL	Apply soon after the break to the season when the weeds are up to the 2 leaf stage. Apply by boom spray or aircraft. Use the highest rate when the majority of plants are at the 2 leaf stage. Some reduction in clover growth may occur for a period after application. Plants usually recover and grow normally. Pasture should be growing well with adequate fertilizer and mite/insect control to help reduce the establishment of later germinating weed seedlings. Larger weeds present at spraying may not be controlled.  <b>DO NOT</b> use on medics. <b>DO NOT</b> apply in less than 50 L/ha water. <b>DO NOT</b> use on seed crops. <b>DO NOT</b> spray after mid-August as damage may occur.
Pastures  Use on mixtures of either/or sub. Clover (min. 3 trifoliolate leaves), Balansa clover (established plants)  White clover (min. 5 trifoliolate leaves) with either/or Ryegrass, Phalaris, Cocksfoot (grasses min. 3 leaves)	Capeweed (seedlings up to 20cm diam.) ( <i>Arctotheca calendula</i> ), Long Storksbill (seedlings up to 8 cm diam.) ( <i>Erodium botrys</i> ), Paterson's Curse (seedlings up to 20cm diam.) ( <i>Echium plantagineum</i> ), Toadrush (1-5 leaves) ( <i>Juncus bufonius</i> ), Crassula (1-5 cm diam.) ( <i>Crassula spp.</i> ),	NSW, Vic, SA & WA only	1L to 1.5L	Apply by boom spray or aircraft. Use the highest rate when weeds are greater than 7 cm in diameter. Where a selective grass herbicide is to be used, apply Terbupac Herbicide prior to the application of the selective grass herbicide. Some reduction in clover growth may occur for a period after application. Plants usually recover and grow normally. <b>DO NOT</b> use on medics. <b>DO NOT</b> apply in less than 50 L/ha water. <b>DO NOT</b> use on seed crops. <b>DO NOT</b> spray after mid-August as damage may occur.

CROP	WEEDS CONTROLLED	STATE	RATE	CRITICAL COMMENTS
Sugar Cane (Plant and ratoon)	Bellvine ( <i>Ipomoea plebeian</i> ), Morning Glory ( <i>Ipomoea purpurea</i> ), Red Convolvulus ( <i>Ipomoea hederifolia</i> ), Pink Convolvulus ( <i>Ipomoea triloba</i> ), Star of Bethlehem ( <i>Ipomoea quamoclit</i> ), Blackberry Nightshade ( <i>Solanum nigrum</i> ), Red Pigweed ( <i>Portulaca oleracea</i> ), Giant (Black) Pigweed ( <i>Trianthema portulacastrum</i> ), Pink Burr ( <i>Urena lobata</i> ), Square Weed ( <i>Spermacoce latifolia</i> ), Thornapple ( <i>Datura stramonium</i> ), Sowthistle ( <i>Sonchus oleraceus</i> ), Native Jute ( <i>Corchorus trilocularis</i> ), Calopo ( <i>Calapogonium mucunoides</i> ), Rattlepod ( <i>Crotalaria spp.</i> ) Annual Ground Cherry ( <i>Physalis ixiocarpa</i> ),  Suppression only Bluetop* ( <i>Ageratum houstonianum</i> ), Common Sensitive Plant ( <i>Mimosa pudica</i> )	Qld, NSW, WA & NT only	2L to 4L*	Apply post-emergent to broadleaf weeds up to 8 leaf or 30 cm diameter stage, vines to 1 m. Application should be made when weeds are growing actively and not suffering from moisture stress or waterlogging. Under cool conditions (<22°C) control may be slower and less effective.  Can be applied over the top of cane. Some initial leaf yellowing and scorch may result but cane normally recovers well within  4 weeks. Caution should be exercised on new varieties of cane which may not have been tested. Use the lower rates on small weeds (less than 4 leaf) and the higher rates for larger weeds. Apply in a spray volume of 200-400 L/ha and ensure thorough coverage. Use the higher spray volumes where weed density is high or weeds are more advanced.  *Bluetop will only be suppressed. Use a minimum of 3 L/ha on weeds less than 10 cm. Common Sensitive Plant – use a minimum of 3 L/ha.
Sugar Cane (Plant and ratoon)	Green Summer Grass ( <i>Brachiaria miliiformis</i> ), Crowsfoot Grass ( <i>Eleusine indica</i> ), Barnyard Grass ( <i>Echinochloa colona</i> ), Guinea Grass ( <i>Panicum maximum</i> var Hamil), Summer Grass ( <i>Digitaria ciliaris</i> ), Bluetop ( <i>Ageratum houstonianum</i> ), Centro ( <i>Centrosema pubescens</i> ), Wild Rose ( <i>Cleome aculeate</i> ), Bellvine# ( <i>Ipomoea plebeian</i> ), Morning Glory ( <i>Ipomoea purpurea</i> ), Red Convolvulus ( <i>Ipomoea hederifolia</i> ), Pink Convolvulus ( <i>Ipomoea triloba</i> ), Star of Bethlehem ( <i>Ipomoea quamoclit</i> ), Giant Sensitive Plant ( <i>Mimosa invisa</i> ), Common Sensitive Plant ( <i>Mimosa pudica</i> ), Stinking Passion Vine ( <i>Passiflora foetida</i> ), Square Weed ( <i>Spermacoce latifolia</i> ), Cinderella Weed ( <i>Synedrella nodiflora</i> ), Giant (Black) Pigweed ( <i>Trianthema portulacastrum</i> ), Pink Burr ( <i>Urena lobata</i> ), Thornapple ( <i>Datura Stramonium</i> ), Sowthistle ( <i>Sonchus oleraceus</i> ), Native Jute ( <i>Corchorus trilocularis</i> ), Calopo ( <i>Calapogonium mucunoides</i> ), Rattlepod ( <i>Crotalaria spp.</i> ), Annual Ground Cherry ( <i>Physalis ixiocarpa</i> ), Blackberry Nightshade ( <i>Solanum nigrum</i> )	Qld, NSW, WA & NT only	3 L (+3 L ametryn 500g/L) to 4L (+3.7 L ametryn 500 g/L)	<b>Use in a tank mix with ametryn 500g/L</b>  Apply between the early 1-4 leaf and late (20 cm for grasses [Guinea grass and summer grass max. 15 cm] and 30 cm for broadleaf weeds) post-emergent stages of weeds. Use the lower rates on small weeds (less than 4 leaf) and for short residual control and the higher rates for large weeds and medium residual control. Where residual control is required the tank mix should be applied to moist soil and when rain or irrigation is expected within 10 days. Application should be made when weeds are growing actively and not suffering from moisture stress or waterlogging.  Under cool conditions (<22°C) control may be slower and less effective. Apply in a spray volume of 200-400 L/ha and ensure thorough coverage. Use the higher volumes where weed density is high or weeds are more advanced.  <b>DO NOT</b> apply this mixture by air.  <b>DO NOT</b> apply over the top of cane. Use a directed spray to minimize contact with sugar cane foliage and shading of weeds.  <b>CAUTION:</b> Contact with the foliage of ametryn sensitive cane varieties such as Q119, Q122 and H56-752 should be avoided as they are susceptible to phytotoxicity from the tank mix. Caution should be exercised on new varieties of cane which may not have been tested.

\* Suppression only at 1.5 L/ha.

† Tolerant oat varieties are listed under the Crop Safety sub heading in the General Instructions section.

# Add Wetter 1000 120mL/100 L or Agral 200mL/100 L (sugar cane only).

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

## GENERAL INSTRUCTIONS

### Mixing

Terbupac Herbicide mixes readily with water. Half fill the spray tank with water. Shake the container several times before use and add the recommended quantity to the tank. Keep the spray mixture well agitated during mixing and spraying using either mechanical or venture type agitation that has sufficient water movement for the solution to remain in suspension. Reseal part used containers immediately. Wash sprayer thoroughly with clean water after use.

### Application

**Boom Sprayer:** Calibrate the sprayer before use to ensure the correct application rate is applied per hectare. Check boom height for even application.

**Cereal and pastures:** Apply 50 to 100 L of water/ha using no smaller than 80 mesh pump and jet filters. Use the higher volume if the weed infestation is heavy or the crop cover is dense.

**Sugar cane:** Apply 200 to 400 L of water/ha using no smaller than 80 mesh pump and jet filters. Use the higher volume if the weed density is high or on more advanced weeds. Thorough coverage is necessary. Always add the required wetter.

**Aircraft:** Apply 20 to 30 L of water/ha. The higher volume is preferred due to more reliable results. Weed control following aerial application may not be as good as from ground application.

### Compatibility

This product can be tank mixed with metsulfuron 600g/kg for the control of specific weeds such as capeweed, sheepweed and toadrush. DO NOT tank mix with diclofop methyl or tralkoxydim as significant crop injury and reduced weed control will occur. In pastures this product can be mixed with MCPA amine and the insecticides dimethoate, phosmet, Karate, alpha-cypermethrin, and omethoate (ensure good agitation is maintained with this product and avoid use of cold water). In sugar cane this product can be tank mixed with Agral, Wetter 1000, 2,4-D amine and ametryn 500 g/L. When tank mixing read both labels and adhere to the crop recommendations and directions that are most restrictive. The compatibilities given are based on experience and are considered correct. However, as changes in climatic conditions can alter the sensitivity of plants to mixtures of sprays, Shandong Rainbow International Co., Ltd accepts no responsibility for the behaviour of such mixtures.

### Timing

Weeds should be sprayed while actively growing and at the 2 to 6 true leaf stage when they are most susceptible. As a general guide Terbupac Herbicide should be applied approximately 5 to 8 weeks after planting. Extremes of cold or drought are unfavourable. The most favourable conditions are when soil is moist, weather fine and rain unlikely within 6 hours following application. In pasture, weeds should be up to 20 cm diameter but refer to the directions for use table for specific details. In sugar cane, apply Terbupac Herbicide alone to broadleaf weeds up to the 8 leaf or 30 cm diameter stage, vines to 1 m length.

### Crop Safety

Research has shown that although some early growth check and leaf margin scorch can occur in oats, if grain yield is measured, the following varieties are tolerant or moderately tolerant to Terbupac Herbicide.

**Tolerant** (apply up to 1.5 L/ha) Bandicoot, Coolabah, Mortlock, Potaroo, Swan, Wallaroo, West.

**Moderately Tolerant** (DO NOT exceed 1L/ha) Dalyup, Windjardie.

DO NOT spray other oat varieties unless you seek advice before spraying.

In pastures sub Clover growth may be reduced for a period after application but plants usually recover and spring growth is not normally affected.

Sugar cane varieties such as Q122 may show yellowing and some leaf scorch immediately after spraying but plants normally recover within 4 weeks.