

POISON

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



Ethephon 720SL®

Growth Regulator

ACTIVE CONSTITUENT: 720 g/L ETHEPHON
(an anti-cholinesterase compound)

For crop thinning, loosening or ripening in various crops and for accelerating boll opening, defoliation and pre-conditioning before defoliation of cotton as specified in the Directions for Use table.

IMPORTANT: READ THIS LEAFLET BEFORE OPENING OR USING THIS PRODUCT

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Leaflet_1117

APVMA Approval No: 69257/60348

GENERAL INSTRUCTIONS

When adding Wetter 1000, use the rate as recommended on this label.

IMPORTANT

Apples – Advancement of fruit maturity and improvement of red colour.

- Ensure fruit has reached marketable size before treatment and keep trees under observation after spraying.
- Ensure fruit is picked at the correct stage of maturity, as fruit not harvested will quickly become over-ripe.
- Continuing low temperatures will advance maturity and colouration; continuing warm to high temperatures, both day and night, will advance maturity but may reduce colouration.
- Apply to fruit only for the fresh fruit market or short term storage.

Apples – Thinning

The complex nature of fruit and the possible variable action of chemical thinners due to weather conditions make it difficult to give set recommendations and growers should consult their local agronomist.

Apples – Fruit Removal

- Apply to trees to remove unwanted fruit and encourage a biennial bearing habit. Excessive vegetative growth will be suppressed and bloom the following season stimulated.
- Weather conditions are very important – warm weather following treatment will improve results, but if temperatures below 18°C prevail after spraying, fruit removal may be reduced. In the latter case, use the higher dose rate.
- Fruit will loosen in 7-10 days and thinning should be complete within 2-3 weeks. Limbs can be lightly shaken to aid removal after this time.

IMPERIAL MANDARINS and VALENCIA ORANGES

Apply during the early stage of fruit development for thinning and correction of the habit of alternate heavy and light crops. Weather conditions influence the degree of thinning and care must be taken not to over-thin.

EXCLUSION OF LIABILITY

As the degree of thinning may vary according to the conditions and over-thinning is possible, the decision to incur these risks is taken by the user, and the manufacturer and vendor exclude themselves from all conditions, representations, warranties, whether expressed or implied by the statute or otherwise and accept no responsibility for any losses which follow from the use of the product on mandarins or oranges as far as this is legally possible under the Trade Practices Act or any State legislation.

COTTON

A foliar spray with Sabakem Ethephon 720SL® Growth Regulator will accelerate opening of mature unopened bolls and enhance defoliation, which can result in earlier harvest and increased recoverable yield and quality. Some premature drop of small immature bolls may occur. Harvest at optimum boll opening and optimum defoliation. Too late harvest may reduce quality and lint.

COTTON – APPLICATION

DO NOT apply before sufficient mature unopened bolls have developed to produce the desired yield of cotton. Bolls are mature when the seed coat turns light brown, the embryo fills the seed cavity with an abundance of creamy colour and cotyledons are well defined.

COTTON – TREATMENT SEQUENCE

- **Light canopy:** Apply Sabakem Ethephon 720SL® Growth Regulator then apply defoliant 4 to 7 days later.
- **Moderate to heavy canopy:** First apply a pre-conditioner, then apply Sabakem Ethephon 720SL® Growth Regulator as soon as sufficient leaves have dropped to expose the target bolls, usually 4 to 10 days later.

COTTON – APPLICATION METHOD

Apply by placement technique under the following range of conditions to achieve a target droplet density of 60 droplets per square cm.

Wind Direction: Cross Wind

Wind speed range: 6-20kph

Air Temperature: Maximum 32°C

Delta t: Maximum 10°C

SUGAR CANE

Sabakem Ethephon 720SL® Growth Regulator may be applied by air or ground spray equipment. Apply in 30 L water/ha by air and 110-150 L water/ha by ground spray equipment. Apply during March-April on cane due for harvest no later than August. Consult your local Sabakem agent or BSES officer.

TOMATOES

- Temperatures below 18°C retard colour development and may extend the interval between treatment and harvest.
- Treatment may cause some yellowing of foliage or defoliation.
- Sun scald of exposed fruit may occur under high temperature conditions following treatment.

MIXING AND APPLICATION

Add Sabakem Ethephon 720SL® Growth Regulator to half the required volume of good quality water in the spray tank, then add the remaining volume of water while agitating the mixture.

DO NOT use alkaline water. Prepare only enough spray solution for immediate use, and DO NOT allow to stand. If tank mixtures are prepared, maintain good agitation and use promptly. Apply as a thorough uniform spray to achieve good coverage. For aerial application apply at least 20 L/ha water. Sabakem Ethephon 720SL® Growth Regulator is corrosive to acrylic plastic, certain paints and metals. Flush and rinse all exposed equipment including aircraft surfaces with detergent and water after use.

COMPATIBILITY

DO NOT mix with desiccants containing sodium chlorate as this could result in emission of toxic chlorine fumes. Sabakem Ethephon 720SL® Growth Regulator may be tank mixed with defoliant products. Since the formulations of other products are beyond the control of Sabakem Pty Ltd, tank mixtures should be tested before commercial use.

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 onto nearby susceptible plants/crops, cropping lands or pastures.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

STORAGE AND DISPOSAL

20L, 200L only: Store in the closed, original container in a dry, cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT use this container for any other purpose. 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 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 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.

Refillable containers (1000L only): Store in the closed, original container in a cool, well-ventilated area. 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 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 contents of the Envirodrum have been used, please return the empty Envirodrum to the point of purchase. The Envirodrum remains the property of Sabakem Pty Ltd.

SAFETY DIRECTIONS

Product is harmful if swallowed. Attacks eyes. Repeated minor exposure may have a cumulative poisoning effect. Protect eyes while using. When preparing spray and using the prepared spray, wear elbow-length PVC gloves and face shield or goggles. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

FIRST AID

If swallowed, DO NOT induce vomiting. Give a glass of water. If swallowed, splashed on skin or in eyes, or inhaled, contact a Poison Information Centre. Phone Australia 13 11 26 or a doctor at once. Remove any contaminated clothing and wash skin thoroughly. If swallowed, activated charcoal may be advised. Give atropine if instructed. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which is available from the supplier.

CONDITIONS OF SALE: The use of this product is beyond the control of Sabakem Pty Ltd. No warranty is expressed or implied regarding the suitability or efficiency for any purpose for which it is used by the buyer. Sabakem Pty Ltd accepts no responsibility for any consequences resulting from the use of this product. Sabakem Pty Ltd will not be held liable for any loss, injury or damage arising from the sale, supply or use of this product, whether through negligence or otherwise. No responsibility will be accepted for any consequences whatsoever resulting from the use of this product.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: May be corrosive to metals. Causes skin burns and eye damage. Harmful if inhaled.

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DIRECTIONS FOR USE

RESTRAINTS:

DO NOT apply to weak or stressed plants.
 DO NOT apply if rain is expected within 8 hours of application.
 DO NOT apply if day/night temperatures are expected to be below 18°C.
 DO NOT apply if cotton bolls have been burned by frost.
 DO NOT pretreat with a desiccant (chlorate) before using Sabakem Ethephon 720SL® Growth Regulator.
 DO NOT mix with hard (alkaline) water.
 DO NOT apply before sufficient mature unopened bolls have developed to produce the desired yield.

CROP	MODE OF ACTION	STATE	RATE (High Volume)	WHP	CRITICAL COMMENTS
APPLES: Jonathan, Delicious	Advancement of maturity, improvement of red colour	Qld, NSW, Vic, SA, WA only	35-65 mL/100 L water PLUS Wetter 1000 and add "stop drop"	7 days	Ensure fruit has reached marketable size before treatment and keep trees under observation after spraying. Apply 2 to 3 weeks before normal harvest period and 7 to 14 days before desired harvest date. Ensure fruit is picked at the correct stage of maturity, as fruits not harvested will quickly become over-ripe. Note: For best results spray when temperatures are between 15° and 32°C. Continuing low temperatures will advance maturity but may reduce colouration, so use lower rate. Use higher rate for quicker response. Add a "stop-drop" to prevent premature loosening of fruit. Thorough coverage is essential. Apply to fruit only for the fresh fruit market or short term storage.
		Tas only	25 mL/100 L water and add "stop drop"		
Gravenstein, Golden Delicious, Jonathan and Red Delicious	Thinning*	Vic, SA only	15 mL/100 L water PLUS Wetter 1000	7 days	Apply at full bloom OR up to 1 week following full bloom. A second thinning spray 10 to 14 days after the Sabakem Ethephon 720SL® Growth Regulator spray may be necessary. On Gravenstein and Golden Delicious apply carbaryl or 5 to 7.5ppm NAA (use higher rate for maximum thinning). On Jonathan and Red Delicious apply carbaryl or 4ppm NAA.
Golden Delicious, Stark Crimson and Legana		Tas only	35 mL/100 L water PLUS Wetter 1000		
Golden Delicious, Red Delicious, Jonathan, Granny Smith		WA only	35 - 40mL / 100 L water PLUS Wetter 1000		
Lady William			45-65 mL/100 L water PLUS Wetter 1000		
All varieties	Aid complete removal of fruit from trees and encourage a biennial bearing habit (Excessive vegetable growth will be suppressed and the following bloom stimulated)	NSW, SA, WA only	65-135 mL/100 L water PLUS Wetter 1000	7 days	Apply just prior to full bloom OR 5 to 6 weeks later during early morning or late afternoon when slow drying conditions occur. Ensure thorough coverage of foliage and flowers or fruit. Note: Under normal weather conditions use lower rate for Delicious and higher rate for Jonathans as they are difficult to de-fruit. Consult the local Department of Agriculture for specific recommendations on other varieties. Warm weather following treatment will improve results, but if temperatures below 18°C prevail after spraying, fruit removal may be reduced, in the latter case use a higher dose rate. Fruit will loosen in 7 to 10 days and thinning should be complete within 2 to 3 weeks. Limbs can be lightly shaken to aid removal after this time.
	Retard vegetative growth and stimulate flowering of young apple trees in the following season		65-135 mL/100 L water PLUS Wetter 1000		
CHERRIES: Ron's Seedling, St. Margaret, Napoleon, Florence	Promote evenness of maturity; early colour development	NSW only: Young district	20 mL/100 L water	7 days	Treatment with Sabakem Ethephon 720SL® Growth Regulator: Apply when approximately 20% of the fruit show pink to red colour development, normally 7 to 10 days before harvest. Ensure thorough coverage of leaves and fruit. Note: High temperature at spraying or following spraying may accelerate results. DO NOT spray when mean daily temperatures exceed 32°C. DO NOT spray when rain is expected within 24 hours OR when temperatures are low (17°C or less) as this will delay or reduce the effect of Sabakem Ethephon 720SL® Growth Regulator. Fruit will mature 3 to 5 days earlier than normal and will be loosened to allow easier harvesting. A high proportion of fruit will readily separate from the stalk when harvested.
		Orange/Bathurst district	40 mL/100 L water		
TABLE GRAPES: Barlinka	To promote early uniform colouring	NSW, SA only	15-20 mL/100 L water PLUS Wetter 1000	14 days	Apply when 5 to 30% of the berries are coloured (2-4 weeks prior to expected harvest). Use the higher rate to maximise the colouring effects required. Ensure thorough coverage of bunches although the foliage need not to be completely covered. Note: Sabakem Ethephon 720SL® Growth Regulator may slightly reduce firmness of grapes. DO NOT use on grapes intended for long storage.
Red Emperor, Red Prince, Red Malaga, Cardinal, Muscat of Hamburg		NSW, Vic, SA, WA only	25-40 mL/100 L water PLUS Wetter 1000		
Flame Seedless		WA only			
WINE GRAPES: Semillon	Aids to mechanical harvesting	NSW only	40-130 mL/100 L water PLUS Wetter 1000	7 days	Apply 7 days before expected harvest. Thorough coverage of upper and lower leaf surfaces is essential. Note: Some leaf yellowing and leaf fall, which is not detrimental to vines, may occur. The concentration to use will depend on a number of factors such as seasonal conditions, crop size, weather conditions (before and after application) and trellis type. Therefore, before applying consult the local Department of Agriculture for specific recommendations.
MANDARINS: Imperial	Thinning to increase fruit size, to reduce size of heavy crop and to even out the production cycle	Qld, NSW SA, WA only	35-40 mL/100 L water	Not required	Apply during the early stage of fruit development for thinning and correction of the habit of alternate heavy and light crops. Apply as foliar spray when fruitlets are about 10 to 15 mm in diameter and when natural fruit drop is occurring. This is usually in November in Qld, December in SA and intermediate in NSW, WA and Vic. Weather conditions influence the degree of thinning and care must be taken not to over-thin. Note: Fruitlets should fall off 7 to 14 days after application. Aim to apply 13 to 15 L of spray per 4 to 5 m high tree. Use the higher rate when a very heavy crop is evident. DO NOT apply in cold weather (less than 18°C) OR when rain is likely within 1 to 2 days of spraying. DO NOT add surfactants or wetting agents as leaf fall may be increased. See also General Instructions.
		Vic only	25-35 mL/100 L water		
ORANGES: Navel		NSW, WA only	35-40 mL/100 L water		
		NSW, SA, WA only			
Valencia		Vic only	40-45 mL/100 L water		
MACADAMIA NUTS: Own choice	Aid harvesting by promoting uniform nutfall	NSW, WA only	165 mL/100 L water PLUS Wetter 1000	7 days	Apply late March to early May when nuts are mature. Vary rate according to degree of loosening required. Note: Nuts will be stimulated to fall within 10 to 14 days after spraying. Mechanical shaking may be used 7 to 10 days after spraying. Ensure thorough coverage of foliage and nuts. Ensure tops and insides of trees are adequately sprayed. A small quantity of older leaves will fall after treatment, but production will not be adversely affected. DO NOT use on Teddington variety.
		H2 Variety	55-105 mL/100 L water PLUS Wetter 1000		

CROP	MODE OF ACTION	STATE	RATE (High Volume)		WHP	CRITICAL COMMENTS
CROP	MODE OF ACTION	STATE	GENERAL	BOOM SPRAYING	WHP	CRITICAL COMMENTS
			PEACHES	Advancement and concentration of maturity		
PINEAPPLES (plus Urea)	Initiation of flowering	Qld, WA only	80 mL + 5 kg Urea/100 L water Apply 30 mL solution / plant	1.6 L PLUS 100 kg Urea in 2000 L water/ha (Boom spray)	7 days	Apply in March. Note: Rate should be doubled for plant crops which are growing vigorously at the time of application.
PINEAPPLES (without Urea)	Initiation of flowering in ratoon		25 mL/10 L water Apply 30 mL solution / plant	6 L in 2000 L water/ha (Boom spray)		Apply May-June OR September-October. Note: See above – February/March application with Urea.
			7 mL/10 L water Apply 30 mL solution / plant	1.5 L in 2000L water/ha (Boom spray)		Apply February-March. Note: Use on the final crop in the block before eradication of the crop. Pineapples treated at the above time will be ready for picking 7 to 10 months after application.
PINEAPPLES	Fruit ripening		–	1.7 L in 1000L water/ha (Boom spray)		Apply May-June OR September-October. Note: See above – February/March application without Urea.
SUGAR CANE	Cane ripening	Qld, NSW, WA only	1 L/ha		6 weeks	Sabakem Ethephon 720SL® Growth Regulator for ripening should only be used on even crops successfully induced for flowering with Sabakem Ethephon 720SL® Growth Regulator. DO NOT use on fields intended for ratoon production. Treatment should be made when the forced fruit are beginning to show the first colour break. An initial harvest may be necessary to remove more advanced fruit before applying Sabakem Ethephon 720SL® Growth Regulator. The remaining treated fruit will be ready for harvest at least 7 days following Sabakem Ethephon 720SL® Growth Regulator ripening application. Note: DO NOT use on fruit intended for the fresh fruit market. Sabakem Ethephon 720SL® Growth Regulator for ripening is NOT SUITABLE FOR USE ON SUMMER PLANT CROPS because of scattered fruiting and high risk of forcing young suckers. Where natural fruiting has occurred prior to chemical induction, these natural fruit must be picked before Sabakem Ethephon 720SL® Growth Regulator ripening. Treatment too early can result in a loss of yield and a reduction in fruit sugar levels.
TOMATOES	Accelerate ripening, increasing yield of marketable fruit	All States	1.2 L in 440-880L water/ha		7 days	Use in March-April to accelerate ripening in cane and increase c.c.s. Use on cane planted for early harvest with harvest no later than August. Apply to actively growing and non-stressed cane with at least eight non-stressed green leaves. Cane varieties Q115, Q119, Q137, Q124, Q96, H56-752 and CP44-101 have all shown high to moderate response to ethephon. Shortening of some internodes and yellowing of leaves may occur without any effect on cane yield. Test any new varieties prior to application.
TABLE GRAPES: Barlinka	To promote early uniform colouring	NSW, SA only	15-20 mL/100 L water PLUS Wetter 1000		14 days	Apply when 5 to 30% of the berries are coloured (2-4 weeks prior to expected harvest). Use the higher rate to maximise the colouring effects required. Ensure thorough coverage of bunches although the foliage need not to be completely covered. Note: Sabakem Ethephon 720SL® Growth Regulator may slightly reduce firmness of grapes. DO NOT use on grapes intended for long storage.
Red Emperor, Red Prince, Red Malaga, Cardinal, Muscat of Hamburg		NSW, Vic, SA, WA only	25-40 mL/100 L water PLUS Wetter 1000			
Flame Seedless		WA only				
WINE GRAPES: Semillon	Aids to mechanical harvesting	NSW only	40-130 mL/100 L water PLUS Wetter 1000		7 days	Apply 7 days before expected harvest. Thorough coverage of upper and lower leaf surfaces is essential. Note: Some leaf yellowing and leaf fall, which is not detrimental to vines, may occur. The concentration to use will depend on a number of factors such as seasonal conditions, crop size, weather conditions (before and after application) and trellis type. Therefore, before applying consult the local Department of Agriculture for specific recommendations.
MANDARINS: Imperial	Thinning to increase fruit size, to reduce size of heavy crop and to even out the production cycle	Qld, NSW SA, WA only	35-40 mL/100 L water		Not required	Apply during the early stage of fruit development for thinning and correction of the habit of alternate heavy and light crops. Apply as foliar spray when fruitlets are about 10 to 15 mm in diameter and when natural fruit drop is occurring. This is usually in November in Qld, December in SA and intermediate in NSW, WA and Vic. Weather conditions influence the degree of thinning and care must be taken not to over-thin. Note: Fruitlets should fall off 7 to 14 days after application. Aim to apply 13 to 15 L of spray per 4 to 5 m high tree. Use the higher rate when a very heavy crop is evident. DO NOT apply in cold weather (less than 18°C) OR when rain is likely within 1 to 2 days of spraying. DO NOT add surfactants or wetting agents as leaf fall may be increased. See also General Instructions.
ORANGES: Navel		Vic only	25-35 mL/100 L water			
Valencia	NSW, WA only	35-40 mL/100 L water				
	NSW, SA, WA only					
		Vic only	40-45 mL/100 L water			
MACADAMIA NUTS: Own choice	Aid harvesting by promoting uniform nutfall	NSW, WA only	165 mL/100 L water PLUS Wetter 1000		7 days	Apply late March to early May when nuts are mature. Vary rate according to degree of loosening required. Note: Nuts will be stimulated to fall within 10 to 14 days after spraying. Mechanical shaking may be used 7 to 10 days after spraying. Ensure thorough coverage of foliage and nuts. Ensure tops and insides of trees are adequately sprayed. A small quantity of older leaves will fall after treatment, but production will not be adversely affected. DO NOT use on Teddington variety.
H2 Variety			55-105 mL/100 L water PLUS Wetter 1000			

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

WITHOLDING PERIODS:

APPLES, CHERRIES, MACADAMIA NUTS, PINEAPPLES, TOMATOES, WINE GRAPES: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.

TABLE GRAPES AND COTTON: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

PEACHES AND SUGAR CANE: DO NOT HARVEST FOR 6 WEEKS AFTER APPLICATION.

DO NOT FEED COTTON STUBBLE OR GIN TRASH TREATED WITH SABAKEM ETHEPHON 720SL GROWTH REGULATOR TO LIVESTOCK.

DONOT GRAZE LIVESTOCK ON TREATED PLATNS.