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#### READ SAFETY DIRECTIONS BEFORE OPENING OR USING



# Popstar

# PLANT GROWTH REGULATOR

#### ACTIVE CONSTITUENT: 200 g/kg GIBBERELLIC ACID

For foliar spray application to certain varieties of Grapes, Citrus and Prunes to promote desirable harvest effects, and to stimulate the production of winter dormant, grass-dominant pastures for high intensity grazing such as sheep lambing paddocks and dairy pastures. IMPORTANT: Read this booklet before use.

#### APVMA Approval No: 81255/108790

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#### DIRECTIONS FOR USE Restraints:

Apply in water. Note: 5 g product per 100 L = 10 ppm

Use with a non-ionic wetter.

DO NOT apply to plants under pest, nutritional or water stress.

DO NOT apply with aircraft.

DO NOT apply when there is insufficient soil moisture to support rapid pasture growth.

CROP	Rate per 100 L	CRITICAL COMMENTS	
CITRUS		Apply in a minimum volume of 5000 L/ha to ensure thorough coverage of fruit.	
		DO NOT use where blemish is a problem.	
		For optimum results adjust the spray tank solution to pH 4.0 - 4.5 (see mixing instructions).	
Navel &	5 – 10 g	For reduction in Ceasing:	
Valencia		Prior to applying Apparent Popstar, remove all previous season Valencia oranges. Apply Apparent	
Oranges		Popstar when Navel/Valencia oranges are between 30 – 50 mm fruit size or golf-ball stage	
		(generally January-February).	
		Rates lower than 10 g:	
		<ul> <li>Should be used when it is anticipated that fruit will be harvested for early markets.</li> </ul>	
		<ul> <li>May be used on application to late navel selections.</li> </ul>	
Navel	5 g	To delay rind aging for late marketing (or those which will be stored for more than 2 weeks	
Oranges		prior to sale) and reduce rind blemish and for longer storage life, apply when oranges turn	
		from green to silver (colourbreak).	
		If fruit-drop is a problem, then apply a stop-drop spray. Apparent Popstar is compatible with	
		stop-drop sprays containing 2,4-D sodium salt. Use the 2,4-D at 10 ppm.	
Mandarins	5 g	To delay rind aging for late marketing and reducing rind blemish apply at three-quarters to	
		full colour.	

CROP	Rate per 100 L	CRITICAL COMMENTS
Grapefruit	5 g	To delay rind aging, apply the spray when grapefruit turn from green to silver (colourbreak)
		for grapefruit to be harvested up to mid-November, or apply the spray mid-June for
		grapefruit to be harvested in December or January.
Lemons	5 g	To delay rind aging, apply 4-6 weeks ahead of maturity of fruit.
GRAPES		
Currants –	0.5 g + 100 ppm	To achieve berry thinning:
dried fruit	Cycocel	Apply single, combined application (commonly used in NSW and SA) at 100% capfall.
		Ensure thorough coverage of bunches.
	100 ppm Cycocel	To achieve berry thinning:
	followed by	Split application (commonly used in Vic):
	0.5 g Apparent	(a). Apply Cycocel 7 days after bunch droop.
	Popstar	(b). Apply Apparent Popstar at 80 - 100% capfall.
	200 ppm Cycocel	Use the 200 ppm rate of Cycocel on vigorous vines.
	followed by	
	0.5 g Apparent	
	Popstar	
	300 ppm followed	Use the 300 ppm rate of Cycocel on excessively vigorous Carina vines only. Ensure
	by	thorough coverage of bunches.
	0.5 g Apparent	
	Popstar	
Sultanas –	5 g	To achieve berry thinning:
dried fruit	-	Apply when bloom or blossom is at 100% capfall stage (full flowering).

CROP	Rate per 100 L	CRITICAL COMMENTS
GRAPES		Prune according to vigour of the vine – avoid exceeding 8 canes (except in special
(cont)		circumstances).
Sultanas –		Commence thinning late October. Thin bunches to leave one bunch per shoot (the largest).
fresh fruit		Do not exceed 30 bunches per vine. Bunch trimming should be carried out before fruit-set
		to reduce the incidence of tight bunches. For adequate coverage of table grapes apply
		product in a minimum volume of 2250 L/ha directed at the bunch area.
	5 g	To achieve bunch elongation (stretch):
	-	Apply when bunches are half to two-thirds of their final length (when bunches are between
		10 - 15 cm in length). This application is usually applied 10 - 14 days before the first sight
		of bloom.
	5 g	To achieve thinning, two separate applications of 5 g within the same season
	5 g	are required:
		Apply first application of 5 g at 40% capfall.
		Apply second application of 5 g at 80% capfall (usually 2 - 3 days later).
	15 g	To achieve increase in berry size, two separate applications of 15 g within the
	15 g	same season are required:
	-	Apply first application of 15 g when smallest berry size is 4 mm and larger berries up to 6
		mm (berry shatter may be incomplete at this size).
		Apply second application of 15 g at 5 to 7 days later. Trim bunches within two weeks of
		shatter to leave 3 to 4 shoulder sprigs.
		All spray timing stages should be judged on the top part of the bunch, as the bottom is removed
		at trimming.
Early	10 g	To achieve increase in berry size:
Madeleine	Ŭ,	Apply when berries reach 4 mm in diameter. Excessively vigorous vines should be cinctured
		3 - 5 days before treatment with this product.

CROP	Rate per 100 L	CRITICAL COMMENTS
GRAPES	6 g	To achieve thinning:
(cont) Perlette		Apply at 70% capfall.
	10 g	To achieve increase in berry size:
		Following the 6 g application for thinning, apply the 120 g application when berries reach
		4 – 5 mm in diameter.
		Trim bunches as required.
Flame	5 g	To achieve thinning:
Seedless		Apply at 70% capfall.
	15 g	To achieve increase in berry size, two separate applications of 15 g within the
		same season are required:
		Apply first application of 15 g when berries have reached $7 - 9$ mm in diameter.
	15 g	Apply second application of 15 g when berries have reached 9 – 10 mm in diameter.
PRUNES	5 g	Apply 3 - 4 weeks before normal harvest date (when fruit shows approximately 14% soluble solids) to delay harvest 14 - 17 days. This delayed maturity will result in increased sugar
		content band thus dry-out ratio.

CROP	Rate per 100 L	CRITICAL COMMENTS
Pasture	5 - 40 g	To stimulate production of winter dormant, grass-dominant pastures for high
Winter dormant		intensity grazing such as dairy pasture or sheep lambing paddocks.
grass-dominant		Stimulation of winter pastures is dose dependant. Higher dose rates give higher stimulation
for high intensity		of growth however, too high a dose rate in a given situation may reduce the optimal balance
usage		between Total Dry Matter and Total Nutritional Value.
-		Cautions:
		Pasture should be at least 1 year old before applying Apparent Popstar Plant Growth
		Regulator.
		Applications in late winter or early spring may lead to suppression of spring growth.
		Determine local conditions based on the following starting dose rates:
		<ul> <li>phalaris dominant pasture – 5 – 20 g/100 L,</li> </ul>
		this grass is highly responsive to Apparent Popstar Plant Growth Regulator.
		• perennial ryegrass and annual ryegrass dominant pasture - 20 - 40 g/100 L.
		Applications – Apply in a minimum of 100 L/ha.
		• Single: A single application can be made at any time from the beginning of June to the
		middle of August.
		Multiple: If adopting a rotational grazing strategy, multiple applications can be made every
		3 to 4 weeks, with the final application being made no later than the middle of August.
		Fertilizer
		• Ensure there is a sufficient soil fertiliser level to allow for the increase in pasture production.
		Addition of a nitrogen-based fertiliser such as urea may give added pasture growth.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION. WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED.

#### GENERAL INSTRUCTIONS: FRUIT QUALITY (GRAPES)

**Bunch elongation (Stretch):** This product, sprayed onto bunch stems when bunches are half to two-thirds of their final length (usually 10 - 15 cm), causes them to grow longer than normal and may prevent over-tightness of bunches. This application is usually applied 10 - 14 days before first sign of bloom.

Thinning: If sprayed on flowers as they are beginning to open, this product reduces the number of berries on the bunch; i.e. – it has a thinning effect.

Berry Size: The product increases berry size when applied after commencement of flowering. The effect is greatest when applied at shatter.

# Mixing:

Prepare a concentrate solution in 1 to 5 L of water with sufficient products for the required vat volume and strength of spray, add solution to water in the spray vat and agitate.

<u>Citrus only:</u> Ensure the spray mix is in the range of 4.0 - 6.0; however optimum results occur when the spray mix is in the pH range of 4.0 - 4.5. Use a portable pH meter or calibrated pH strips to determine a spray mix pH. Sample 2 or 3 times and average the reading. Adjust high pH's with a suitable acidifying solution and recheck the pH after 5 minutes agitation.

# Wetting Agent:

Add a maximum of 100 ppm of a non-ionic spreader.

<u>Citrus only:</u> If using an adjuvant which includes a spreader, do not add additional spreader.

# Precautions:

Use all solutions on the day of preparation.

## **CROP MANAGEMENT**

Fresh Sultanas: Prune according to the vigour of the vine. Avoid exceeding 8 canes except in special circumstances. Commence thinning in late October. Thin bunches to leave one bunch per shoot (the largest). DO NOT exceed 30 bunches per vine. Bunch trimming should be carried out after fruit set to reduce the incidence of tight bunches. **Citrus:** To maximise product effectiveness and fruit quality, ensure good penetration of spray by skirting and pruning the inside of trees. Hand thinning of fruit may also be of benefit. Even trees with a history of little creasing may require management in "heavy crop" years or with age. Apparent Popstar, particularly at higher rates (20 ppm) can delay colouring by 1 - 2 weeks, early in the season.

#### APPLICATION

(Fresh Sultanas): Make sure vines are watered prior to application of this product. Apply in cool conditions or at night. Where this product is used for dried fruit production, drive-past overall spraying is adequate. For fresh fruit production, good results depend on the thorough wetting of bunches and spraying at the correct stage.

#### If the bunches are missed, they will not react to Gibberellic acid (GA). FOR RECOMMENDATIONS FOR OTHER GRAPE VARIETIES CONSULT YOUR LOCAL DEPARTMENT OF AGRICULTURE.

Citrus: Spray in the cool of the morning or after irrigation in the afternoon. Avoid product application within 4 weeks of any oil spray as oil restricts GA uptake.

Typical water volumes are 5,000 L for small trees, 7,500 L for medium trees and 10,000 L for large trees. For creasing-reduction sprays to be effective, trees must be sprayed to run-off.

# PASTURES

A suitable plant nutrition programme is recommended with the use of this product to ensure the quality of feed produced, and to safe-guard against possible grazing animal health issues.

# COMPATIBILITY

Apparent Popstar can be combined in the spray vat with 2,4-D as a cling spray, as well as with products containing Cycocel, certain insecticide, fungicide or nutritional sprays. Always carry out a small test mix to check compatibility before spraying larger areas. Always check the label instructions for all products used.

# 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.

# PROTECTION OF LIVESTOCK, WILDLIFE, FISH, CRUSATACEANS AND ENVIRONMENT

DO NOT contaminate wetlands or watercourses with this product or used containers.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area, as cool as possible. 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 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.

# SAFETY DIRECTIONS

Avoid contact with eyes and skin. Wash hands after use.

# FIRST AID

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

# SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet (SDS), which can be obtained from the supplier.

# **CONDITIONS OF SALE**

The use of Apparent Popstar Plant Growth Regulator being beyond the control of the manufacturer, no warranty expressed or implied is given by AIRR Apparent Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and AIRR Apparent Pty Ltd accepts with no responsibility for any consequences whatsoever resulting from the use of this product.