



Australian Pesticides &
Veterinary Medicines Authority

Product Name: DUOMAX HC520 PLANT GROWTH REGULATOR
APVMA Approval No: 58843/148849

Label Name:	DUOMAX HC520 PLANT GROWTH REGULATOR
Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	ACTIVE CONSTITUENT: 520 g/L CYANAMIDE
Mode of Action:	
Statement of Claims:	For the regulation of bud burst in Apples, Grapes, Kiwi Fruit, Plums, Almonds and Walnuts as specified in the Directions For Use table
Net Contents:	5 L - 1000 L
Restraints:	RESTRAINTS: DO NOT apply after natural bud break has commenced. DO NOT use Winter Oil before or after application of Duomax HC520. SPRAY DRIFT RESTRAINTS: Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift DO NOT allow bystanders to come into contact with the spray cloud. DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas. DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application. DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

Directions for Use:	This section contains file attachment.
Other Limitations:	
Withholding Periods:	WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED.
Trade Advice:	
General Instructions:	This section contains file attachment.
Resistance Warning:	
Precautions:	
Protections:	PROTECTION OF LIVESTOCK Dangerous to bees. DO NOT spray any plants in flower while bees are actively foraging. PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.
Storage and Disposal:	Store in the closed, original container below 20°C in a cool dry dark place away from sunlight. For prolonged periods store at 4°C in a cool store. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. Non-Refillable containers Triple rinse containers before disposal. Add rinsings to the spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection site. 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. Refillable containers Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.
Safety Directions:	Poisonous if swallowed. Will irritate the eyes and skin. Interacts with alcohol – avoid alcohol on day(s) of use. Avoid contact with eyes and skin. When preparing spray and using the

	prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles. If clothing becomes contaminated with product, or wet with spray, remove contaminated clothing immediately. If product or spray on skin, immediately wash area with soap and 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 and face shield or goggles and contaminated clothing.
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First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26 . If swallowed, DO NOT induce vomiting. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.
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First Aid Warnings:	IMPORTANT : DO NOT consume alcoholic beverages 24 hours before or after use. MATERIAL SAFETY DATA SHEET Additional Information is listed in the Material Safety Data Sheet available from the supplier.
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DIRECTIONS BEFORE USE

Crop	Mode of Action	State	Rate	Critical Comments
Almonds	Regulation of bud break and uniformity of flowering	All States	2 L/100 L water	Apply at 35 days before expected bud break of almonds, to advance and concentrate blossoming. Apply near the point of runoff, so that thorough and complete coverage of buds is achieved. DO NOT apply to almonds later than 30 days before expected bud break as damage may occur. Higher temperatures immediately before and in the 3 – 5 days following application will improve response. Early blossom timings may result in the potential for increased frost damage. Application may advance and shorten the flowering period, this may affect cross pollination where the flowering period coincides with adverse weather conditions, ensure pollinators are also treated. In an interplanted block, spray according to anticipated bud break timing of the earliest variety (unless each variety can be sprayed separately). With the potential for advancement and shortening of the flowering period, beehive management will need to be considered to ensure adequate pollination.
Apples	Regulation of bud dormancy	All States	2-3 L/100 L water	Apply at 30 to 45 days before expected budburst (50% greentip on spurs) of apples (see General Instructions), to advance budburst and flowering. Apply as a fine spray to the point of runoff, so that complete coverage of buds is achieved. Use the higher rate of application where more difficult budbreak conditions occur such as on varieties requiring higher chilling on warm northern slopes and/or where there has been a warmer winter. DO NOT apply to apples later than 25 days before expected budburst, as this will not result in advanced budburst and flowering and damage to buds may occur. Higher temperatures immediately before and in the 3-5 days following application will improve the response. Conversely, cold weather following application will reduce the response.

Plums and Prunes	Regulation of bud dormancy	All States	1 L/100 L water	Apply between 35 and 45 days before expected bud break (commencement of flowering) of plums, prunes (see General Instructions), to advance and concentrate blossoming and advance foliation. Apply as a fine spray to the point of runoff, so that complete coverage of buds is achieved. DO NOT apply to plums or prunes later than 30 days before expected bud break, as this will not result in advanced bud break and flowering and damage to buds may occur. Higher temperatures immediately before and in the 3-5 days following application will improve the response. Conversely, cold weather following application will reduce the response. Early blossom times may result in the potential for increased frost damage. Application may advance and shorten the flowering period. This may affect cross pollination especially where the flowering period coincides with adverse weather conditions. Ensure pollinators are also treated.
Kiwi fruit		Qld, NSW, Vic & WA only	4-6 L/100 L water	Apply to dormant canes, cordons or trees, using sufficient spray volume to ensure thorough coverage of all buds. DO NOT apply the chemical within 2 weeks of anticipated natural bud break of kiwi fruit.
Table Grapes		All States	3-5 L/100 L water	Bud break will usually occur 30-35 days later, although if warm conditions occur after application bud break could occur 14-21 days later.
Wine Grapes		All States	2-3 L/100 L water	Note: New shoots may be damaged by frost. If applied earlier than 35 days before natural bud break, low temperatures at flowering may reduce fruit set. Lower dose rates should be used when there has been a cold winter to naturally chill the crop.

Walnuts	Regulation of the timing of bud break and uniformity of flowering	All States	2 L/100 L water	Apply during dormancy 35 - 45 days prior to the expected bud break to advance flowering. Application of Duomax HC520 35-45 days prior to expected bud break may also be effective in concentrating flowering. DO NOT apply to walnuts later than 30 days before expected bud break as damage may occur. In an interplanted block, spray according to anticipated bud break timing of the earliest variety (unless each variety can be sprayed separately). Ensure water volumes match canopy size and density to achieve adequate coverage of all buds. The varieties treated need to be considered prior to application to limit the occurrence of pistillate flower abortion (PFA).
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**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL
UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.**

GENERAL INSTRUCTIONS

Duomax HC520 promotes uniform and increased and earlier than normal bud break. The best time to apply the product may vary in different districts. It is important to determine local experience. The product promotes increased fruit set and in order that vines or trees are not over-cropped, fruit loads must be adjusted to a level which can be carried satisfactorily. This will depend upon the vigour of the vines or trees and the agronomic conditions under which they are grown. As increased growth (vegetative and fruit load) can be expected after application, growth must be supported by increased inputs, such as irrigation and fertiliser.

Apples: Duomax HC520 is a plant growth regulator, which may be used in apples to increase and advance budburst and flowering. In some cases this will lead to more uniform flowering, allowing better results from thinning sprays. Thinning practices and manipulation of cross pollinators may need to be adjusted when using Duomax HC520. Application of Duomax HC520 leading to earlier budbreak and flowering can increase the risk of frost damage, particularly if early applications are made in colder districts. Because budbreak dates for apples may differ from year to year, several factors need to be considered before making a decision on the best time to apply Duomax HC520 to apples. Take into consideration historical data, conditions during the current season (accumulation of chilling units), varietal differences and the physiological development (bud stage) of the trees to be treated. Application of Duomax HC520 can lead to advanced fruit growth and may result in earlier harvest of fruit, particularly in warmer districts. This may reduce red coloration of apples if temperatures are high at harvest.

Identification of breaking reproductive bud dormancy and flowering in almond: Timing the application of Duomax HC520 is critical to the success of the product and to ensure there is no damage to buds. Late application of Duomax HC520 can lead to crop loss. **DO NOT** apply later than 30 days before expected bud break as damage may occur. Contact EuroChem Pty Ltd or the local representative for advice on determining the stages of almond crop bud movement.

POLLINATION: Duomax HC520 promotes uniform bud burst over a short period. In kiwi fruit, almonds, apples, plums and prunes to ensure adequate pollination of a greater number of blossoms flowering over a shorter period, an increased number of bees and/or artificial pollinators may be required. Ensure pollinator varieties are also treated.

MIXING: Half fill spray tank with water, add Duomax HC520 and wetting agent, then remainder of water. Agitate to mix thoroughly. The addition of a non-ionic 600g/L wetting agent at a rate of 50 ml/100 L of spray solution, is recommended to ensure thorough wetting of the vines or trees.

COMPATIBILITY: Do not mix with other pesticides.