

# Ralex®

PLANT GROWTH REGULATOR SOLUTION

**ACTIVE CONSTITUENT: 40 g/L GIBBERELIC ACID**

**For reduction of flowering and fruiting (thinning) of apricots, nectarines, peaches, mandarins and navel oranges in the next cropping season**

## GENERAL INSTRUCTIONS

### Mixing

Prepare spray material by mixing the required amount of product with water only in a clean, empty spray tank. Do not apply a wetting agent. Do not allow solution to stand for more than 24 hours. Ensure the spray mix is in the pH range of 6.0 to 8.0. Use a portable pH meter or calibrated pH strips to determine the spray mix pH. Adjust high pH's with a suitable acidifying solution and recheck the pH after 5 minutes agitation.

### Application

Application is recommended by ground sprayer. For optimum results in apricots, nectarines and peaches uniform coverage of leaves, shoots and buds is required. For optimum results in mandarins complete coverage of the bud wood is required.

Appropriate spray nozzles and machinery are important. Too much spray directed at the lower sections of the canopy may overthin these areas but not result in sufficient thinning in the upper canopy. Use sufficient water volume to ensure thorough wetting of the whole canopy (in mandarin thorough wetting of the whole bud wood is required and may require 3000-5000 L/ha depending on tree size). A typical spray volume in navel oranges to wet budwood is 3000 L/ha however, to ensure uniform coverage of budwood it is recommended to spray to the point of run-off. Responses will vary with species, variety, rate, application timing and temperature. For best results apply when temperatures are between 20 and 30°C.

Use with caution when trees have been harmed due to winter injury, over cropping, etc.

### Controlled Use

There are hundreds of stonefruit and many citrus varieties with new varieties being commercialised regularly. Different varieties respond differently to Ralex. Low rates may be sufficient for some varieties but insufficient for others. For easy to thin varieties the high rates may cause excessive thinning. Weather conditions, chill-factor, plant stress, growing conditions all play a role in the final thinning result. Because so many factors are important, we recommend:

1. Growers who have not used Ralex previously, or who have planted new varieties, should apply Ralex to a row or two of each variety over a few seasons.

2. When treating whole blocks, a row or two, that receives no spray drift, should be left untreated (ie an untreated control) so that the level of thinning response due to Ralex can be clearly quantified.
3. Growers should keep accurate records of date of application, rates and volume of spray applied, temperature and relative humidity at time of application, and the level of thinning response obtained.
4. Growers need to decide what level of thinning best suits their operations, and then apply the rate that results in this level of thinning. Experience over several years will identify this rate. Precise determination of levels of thinning are necessary and are best recorded using the methodology appropriate for your crop (ie blossom counts; quadrant counts).

## 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 WILDLIFE, FISH, CRUSTACEA AND ENVIRONMENT

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

## STORAGE AND DISPOSAL

Keep out of reach of children. Store in the closed, original container in a dry, cool (below 30°C), well-ventilated area out of direct sunlight. 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

## SAFETY DIRECTIONS

Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin. When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC gloves and goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

## FIRST AID INSTRUCTIONS

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

## SAFETY DATA SHEET

Additional information is available on the Safety Data Sheet (SDS) available from the supplier.

## IMPORTANT NOTICE

These goods are to be used only for the purpose and as specified on the label, and are not suitable for any other purpose. To the fullest extent permitted by law, we do not accept or bear any liability on any basis for any loss, damage, cost or expense, arising in any way, directly or indirectly, in connection with the goods.

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### HIGHLY FLAMMABLE LIQUID AND VAPOUR CAUSES SERIOUS EYE DAMAGE MAY CAUSE DROWSINESS OR DIZZINESS

Keep away from heat/sparks/open flames/hot surfaces

NO smoking

Ground/bond container and receiving equipment

Use explosive-proof electrical/ventilating/lighting equipment

Use only no-spark tools

Take precautionary measures against static discharge

Avoid breathing mist/spray

In case of fire: use foam, dry chemical or carbon dioxide to extinguish

If eye irritation occurs: Get medical Advice/Attention

If inhaled: Remove person to fresh air and keep comfortable for breathing

<b>UN No.</b> 1219	<b>ISOPROPANOL</b> (ISOPROPANOL ALCOHOL)	
<b>PG II</b>	<b>HAZCHEM</b> 2[Y]E	
<b>In a Transport Emergency</b> <b>Dial 000</b> Police or Fire Brigade		<b>SPECIALIST ADVICE</b> <b>IN EMERGENCY ONLY</b> <b>ALL HOURS - AUSTRALIA WIDE</b> <b>1800 024 973</b>

## DIRECTIONS FOR USE

### RESTRAINTS

**DO NOT** apply if rain is likely within 6 hours.

**DO NOT** apply in combination with other growth regulators or pesticides.

**DO NOT** apply to low vigour trees under pest, nutritional or water stress.

Use only on fully bearing mature trees.

CROP	RATE	CRITICAL COMMENTS
STONEFRUIT: Apricots, Nectarines, Peaches	70 to 400 mL/100L water in a minimum volume of 1000L	<p>Apply as a single spray at flower bud initiation stage. This is generally from early December to late January.</p> <p>Timing of application is dependent on the variety, with application to early season varieties being made in early December and application to late season varieties being made late in January. Please consult your Sumitomo Chemical Australia Pty Ltd representative for the latest information on the best application timing and rate for your varieties and region.</p> <p>Increase rate to increase thinning efficacy but do not apply more than 400 mL/100L as this may lead to excessive thinning.</p> <p>Additional blossom or fruit thinning may be necessary to adjust the final crop load; where late frosts occur fruit thinning will be preferable to blossom thinning.</p> <p>If fruit are present, fruit firmness may be increased. Soluble solids levels may be slightly delayed in some varieties.</p> <p><b>DO NOT</b> apply less than 1000 L/ha.</p> <p>Please review the recommendations in the GENERAL INSTRUCTIONS.</p>
CITRUS: Mandarins	50 to 200 mL/100L in a minimum volume of 3000L	<p>Apply as a single spray at flower bud differentiation stage. This is generally from June to July.</p> <p>Exact timing of application is dependent on the variety and region. Please consult your Sumitomo Chemical Australia Pty Ltd representative for the latest information on the best application timing and rate for your region and variety.</p> <p>Spotting of fruit may occur when a Ralex application is made to fruit during or followed by a period of cold weather (2-5oC), frosts or unusually wet weather. This period is likely to occur from late May to mid July. The spotting is transitory and usually disappears within 10 to 21 days, however may return if fruit is placed in cold storage.</p> <p>Application of Ralex may delay harvest. Please review the recommendations in the GENERAL INSTRUCTIONS.</p>
Navel Oranges	150 to 200 mL/100L in a minimum volume of 3000L	<p>Apply as a single spray at flower bud initiation stage. This is generally from May to June.</p> <p>Timing of application is dependent on the variety and location. Please consult your Sumitomo Chemical Australia Pty Ltd representative for the latest information on the best application timing for your varieties.</p> <p>Application of Ralex may delay harvest. <b>DO NOT</b> apply to trees that are in an "off" flowering year. <b>DO NOT</b> apply more than 200 ml/100L as this may lead to excessive thinning. Please review the recommendations in the GENERAL INSTRUCTIONS.</p>

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

### WITHHOLDING PERIOD (WHP):

**NOT REQUIRED** WHEN USED AS DIRECTED.