

# RAYNOX<sup>®</sup>

## *A Clear Solution to Sunburn*

Effective and Convenient Sunburn Protection

### The Choice is Clear!

- RAYNOX<sup>®</sup> does not leave a visible residue.
- Aggressive cleaning is not necessary to eliminate residues in the packingline.
- Won't wash off easily (in the field) and does not require reapplication after rain.
- No negative effects on beneficial insects; does not encourage "mite flare ups".
- Does not cause irritation to nasal passages or skin of workers.
- RAYNOX<sup>®</sup> reduces sunburn by 50% on average.
- RAYNOX<sup>®</sup> is an easy to use liquid formulation, available in 200L & 25L containers.



**COLIN CAMPBELL (CHEMICALS) PTY LTD**

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[www.campbellchemicals.com.au](http://www.campbellchemicals.com.au) (02) 9725 2544



# Sunburn in Pineapples

- Is caused by excessive heat and exposure to solar radiation (UV light).
- Sunburn is induced when the pineapple surface temperature reaches 45°C to 49°C for a period of 1 hour. For this to occur in Australia the key conditions would be an air temperature of about 30°C and/or low humidity, (see graph below).
- Sunburn Necrosis (see below) occurs when the apple surface temperature exceeds 52°C for only 10 minutes. Thermal death occurs and necrosis appears.
- Sunburn is also a major source of cullage, and causes some fresh fruit markets to be near impossible to grow for, costing growers large amounts of money every year.

## How does RAYNOX® Effectively reduce sunburn?

- **RAYNOX** is a liquid concentrate formulation that produces a CLEAR film on the fruit surface.
- **RAYNOX** protects the fruit from Sunburn by reducing the amount of UV and visible light reaching the fruit surface.
- **Raynox** lowers the “stress load” in the fruit reducing the generation of oxidative molecules, resulting in fewer sunburn symptoms.
- Overseas independent testing has shown that Raynox performs as good as any particle film product available in the market.



*“I find that Raynox reduces sunburn to an economical level. Raynox is at least as good in sunburn reduction as the whitewash products. I see that the clear finish Raynox gives me will make my marketing of fresh market pineapples much easier.”*

*-Tony Accorsini  
Pineapple grower - Mutarnee QLD*

## Frequently Asked Questions (FAQ)

### **Do I need to use this water softener?**

YES! The use of the correct amount of Raynox Water softener is crucial to the use and performance of Raynox. If you do not use the correct amount of water softener you can suffer product degradation and it may adversely affect Raynox's performance and fruit finish.

### **Does Raynox need to be re-applied after rain?**

No! Raynox is rainfast within about 1 hour after application and does not need to be re-applied after rain.

### **Can I just spray my crop when temperatures are hot?**

To get sufficient sunburn reduction you must follow the 3-Week interval spray program. The multiple sprays are designed to keep up with the pineapples natural growth and coat newly grown areas with Raynox. If applications are too far apart then newly grown areas are unprotected and are easily sunburnt.

**Make the clear choice and call us today for the location of your nearest retailer and to learn more about how RAYNOX can help reduce your cullage and increase your profits.**

# How do I use RAYNOX® on Pineapples?

Applications of Raynox need to **start before sunburn occurs and effective sunburn reduction occurs using a multiple spray program.**

1. The first application should be applied before heat events that promote fruit sunburn. **Commence application 10-12 weeks before harvest.** Pineapples are most vulnerable to sunburn on clear, calm days with air temperatures that are generally above 30°C and with low humidity.
2. Reapply additional applications at approximately 3-week intervals depending on climatic conditions until fruit is fully sized.

Pineapples are most vulnerable to sunburn when air temperature is 30°C with low humidity. If these conditions are likely to occur around the time an application of Raynox is due, apply Raynox **before** these conditions occur.

## How much do I use?

For the commonly ground application (by airblast) apply 25L Raynox/975L treated water for each hectare (ha) (1:40 ratio). Apply this solution at a rate of 1,000L per ha.

For aerial application (by helicopter only) apply 25L Raynox per hectare in 120L of solution per hectare (120L solution = 25L Raynox & 95L treated water).

**No matter what application method you use make sure that use you the correct amount of Raynox Water Softener!**

## Frequently Asked Questions (FAQ)

### My spray tank holds more than 1,000L water. Do I still put 25L Raynox in?

You must maintain a dilution of 1:40. Using 25L of Raynox in more than 1,000L will dilute Raynox too much and result in lower efficacy.

This means if your tank holds:

1,500L water add 37.5L of Raynox

2,000L water add 50L of Raynox

2,500L water add 62.5L of Raynox

### My spray equipment is calibrated to less than 1,000L per hectare. What should I do?

A water volume of 1,000L/ha is preferable. However, if a lower volume of water is used (minimum 500L/ha) a Raynox rate of 25L/ha must be maintained.

### It is during the season and I see sunburn on my fruit, why hasn't Raynox worked?

On the contrary Raynox has been working! Like all sunburn products Raynox reduces the effect of sunburn and moves the majority of your fruit into categories 0 and 1 of the Schrader McFerson sunburn scale. There will always be sunburnt fruit but when you use Raynox there will be less of them!

Also unlike particle film products Raynox is clear and does not hide any sunburn, so the human eye will automatically go towards that sunburnt fruit. The best way to assess the performance of Raynox is to analyse the pack out percentages of that particular block.

### Can I tank mix Raynox with any other product?

NO! Raynox needs to be applied on its own as compatibility and interaction with any other product in a tank mix has not been established.





Campbell

# Colin Campbell (Chemicals) Pty Ltd

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CELEBRATING OUR 75<sup>TH</sup> YEAR IN 2015.



## CONTACT Us

5 Blackfriar Place  
PO Box 6789  
Wetherill Park, NSW 2164  
Australia

Ph: (02) 9725 2544  
Fax: (02) 9604 7768  
Email: [info@campbellchemicals.com.au](mailto:info@campbellchemicals.com.au)  
Website: [www.campbellchemicals.com.au](http://www.campbellchemicals.com.au)  
ABN: 29 000 045 590

### Queensland & Northern NSW

Ross Campbell Ph: 0417 695 709 [ross@campbellchemicals.com.au](mailto:ross@campbellchemicals.com.au)

### Turf Nationally & Central West NSW, Hunter Region, Sydney, Southern Victoria & Tasmania

Nadeem Zreikat Ph: 0403 110 608 [zreikat@campbellchemicals.com.au](mailto:zreikat@campbellchemicals.com.au)

### Southern NSW, Northern Victoria, Goulburn Valley & SA

Roy Stipo Ph: 0428 630 545 [roy@campbellchemicals.com.au](mailto:roy@campbellchemicals.com.au)

### National Sales Manager & Western Australia

Ramsay Zreikat Ph: 0417 775 041 [ramsay@campbellchemicals.com.au](mailto:ramsay@campbellchemicals.com.au)

### Research & Development Manager

Geoff Derrick Ph: 0418 646 046 [cccsyd@campbellchemicals.com.au](mailto:cccsyd@campbellchemicals.com.au)

