

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

## Plant Growth Regulator



# DOUROCIL 25 EC

Reg. No. L 10959 Act/Wet No. 36 of/van 1947

*A synthetic plant growth regulator for the improvement of fruit size of various citrus cultivars.*

*'n Sintetiese plantgroeireguleerder vir die verbetering van vruggrootte van verskeie sitrus kultivars.*

### ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

dichlorprop-p (as 2-ethylhexyl ester) **25 g ae /se/l** dichlorprop-p (as 2-etielhexiel ester)



**villa**

Registration holder / Registrasiehouer:  
Rainbow Agrosiences (Pty) Ltd.  
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CAUTION  
VERSIGTIG



GERBUKSAANWYSINGS INGESLUIT

VERWYS NA BESONDERHEDE  
GEDRUK OP HOUER/SAK

Date formulated:  
Formuleringsdatum:

DIRECTIONS FOR USE ENCLOSED  
REFER TO DETAILS PRINTED  
ON CONTAINER/BAG

Batch number:  
Lotnommer:

## **DOUROCIL 25 EC**

### **ACTIVE INGREDIENT / AKTIEWE BESTANDEEL:**

dichlorprop P (as 2-ethylhexyl ester) / dichlorprop P (as 2-ethylhexyl ester)..... 25 g ae /se/l

### **CAUTION / VERSIGTIG**

#### **WARNINGS**

- Allow 90 days between application and harvest of fruit.
- Handle with care.
- Poisonous if swallowed.
- May cause skin and eye irritation.
- Store away from food, feeds, seed and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.

**Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors, such as abnormal climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label, as well as by the method, time and accuracy of application. The registration holder further does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned, due to failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in event of any uncertainty.**

#### **PRECAUTIONS**

- Do not inhale fumes or spray mist.
- Wash contaminated clothing daily.
- Wash with soap and water after use.
- In case of eye contact, rinse immediately with plenty of water.
- Do not eat, drink or smoke whilst mixing, applying, or before washing hands and face or changing of clothing.
- Clean applicator with a household ammonia solution (1 %) before using with other pesticides. Let solution stand for several hours, preferably overnight. Rinse at least twice. This applicator should not be used for applying chemicals other than herbicides. Dispose of wash water where it will not contaminate food, grazing, rivers or dams.
- **TRIPLE RINSE:** empty containers in the following manner: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler ([www.croplife.co.za](http://www.croplife.co.za)).
- Destroy empty container by perforation and flattening.
- **Never** re-use it for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

#### **FIRST AID TREATMENT**

- Inhalation: Remove the patient immediately from the source of poisoning to a cool, well-ventilated area and keep him/her calm and reassured.
- Eye contact: Wash eyes with clean, running water for at least 20 minutes while holding eyelid(s) open. If irritation persists, get medical attention immediately.
- Skin contact: Remove contaminated clothing. Wash contaminated areas with soap and water. If irritation persists, get medical attention immediately.
- Ingestion: Do not induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration. Do not apply mouth-to-mouth respiration.
- Never give anything by mouth to an unconscious person.
- Take the patient immediately to the nearest physician and show this label to him/her.

## **USE RESTRICTIONS**

### **(a) ORANGES, CLEMENTINES AND SATSUMAS:**

- Excessive applications of potassium prior to or after **DOUROCIL 25 EC** application may cause granulation of fruit. Avoid application of potassium nitrate leaf sprays to increase fruit size in conjunction with a **DOUROCIL 25 EC** application.
- Fruit from trees on rough lemon and volkameriana rootstocks, as well as those planted in sandy soils have a tendency to granulate. In these cases, with exceptionally high potassium levels, fruit may granulate if **DOUROCIL 25 EC** is applied.

### **(b) ORANGES, CLEMENTINES, SATSUMAS AND GRAPEFRUIT:**

- Do not apply to trees under severe water stress (drought or water logging) and/or to trees with malnutrition.
- To prevent damage, do not permit drift of vapour or spray mist onto sensitive broadleaf crops, fruit trees or ornamentals. Apply the product strictly in accordance with the application directions.
- The wind speed and direction at the time of application will determine the distance, which must separate the closest edge of the area to be sprayed from susceptible crops

<b><i>Wind speed km per hour</i></b>	<b><i>Ground Application</i></b>
1.5 to 5 km per hour	200 m downwind 200 m crosswind 6 m upwind
5 to 10 km per hour	400 m downwind 200 m crosswind 1.5 m upwind
10 to 15 km per hour	800 m downwind 400 m crosswind 1.5 m upwind
Above 15 km per hour	Prohibited

- Apply **DOUROCIL 25 EC** as a medium cover spray with correctly calibrated orchard application equipment.
- Do not spray during the heat of the day when ambient temperatures exceed 30 °C.
- Do not spray under low humidity conditions. The difference between the wet and dry bulb readings as determined by a whirling hygrometer, must not exceed 8 °C.
- The optimum time for application is during early morning as soon as the dew has evaporated from the leaves.
- Apply the spray mixture immediately after mixing and do not allow the mixture to stand for long periods or do not leave overnight in mixing tank.

## **GENERAL**

- **DOUROCIL 25 EC** can best be described as a synthetic plant growth regulator, belonging to the auxin group of plant growth regulators. Auxins in the plant are responsible for, amongst other things, improving cell wall elasticity and subsequent cell expansion.
- Where the history of the orchard indicates that the overall fruit size is less than optimum, due to small fruit, but trees are in commercially viable condition, then **DOUROCIL 25 EC** can be applied.
- Where an application is made at the lower end of the fruit growth diameter scale (as per Table 1) a certain degree of thinning may result.

## **DIRECTIONS FOR USE: Use only as directed.**

Apply a single application at the end of physiological fruit drop, as indicated in Table 1.

## **Determine the average fruit size with regard to diameter as follows:**

Select 100 fruit at random and measure diameter of each fruit. It is important that only fruit, which is healthy and dark green in colour be measured. Fruit size will determine application timing, according to Table 1.

## **RECOMMENDATION**

The fruit size range that is specified in Table 1, recommends that:

### **a) ORANGES, MANDARINS AND CLEMENTINES:**

- Trees in cool areas, under small fruit conditions, small fruit cultivars, trees planted in heavy soils and in

- orchards with high yield potentials, should be sprayed at the earlier fruit size stage for optimal thinning.
  - Under medium size fruit conditions, or conditions where a low crop yield and small fruit are expected, spraying time would be when fruit size is between the first and the second suggested fruit diameter.
- b) **GRAPEFRUIT:**
- Orchards in a good condition, with vigorous growth and free from disease, but with a tendency to produce small fruit, are suited for **DOUROCIL 25 EC** application. The treatment is aimed at increasing fruit size and not fruit thinning.
  - Apply when average fruit diameter is between 16 and 28 mm.

**Table 1: Application timing according to fruit diameter measurement.**

<i>Citrus</i>	<i>Cultivar</i>	<i>Fruit Diameter</i>	<i>Dosage</i>
Oranges	Delta	18 to 25 mm	150 ml per 100 litres water.  Apply 4 to 5 litres spray mixture per metre height of tree.
	Valencia	18 to 25 mm	
	Navels	18 to 25 mm	
	Other	18 to 25 mm	
Mandarins	Soft citrus	11 to 14 mm	
	Owari Satsumas	15 to 20 mm	
	Miho-Wase Satsumas	15 to 20 mm	
Clementines	Nules Clementine (for heavy crop)	8 to 11 mm	
	Oroval (only when a history of small fruit is known)	12 to 15 mm	
	SRA (for heavy crop)	8 to 10 mm	
	SRA	10 to 12 mm	
	Marisol (presently no sprays)	None	

#### **APPLICATION INSTRUCTIONS**

- Apply a single application as per fruit size recommendation in Table 1.
- It is recommended to add a non-ionic wetting agent to the **DOUROCIL 25 EC** spray mixture.
- If the pH of the spray water is higher than 6, add a pH buffering agent to correct the pH of water to between pH 4.5 and 5 before adding **DOUROCIL 25 EC** to the spray water.
- Ensure good even spray coverage of the entire tree is achieved.