

# MASTER LABEL

## PERLAN<sup>®</sup>

### Plant Growth Regulator Solution

Sublabel A: Agricultural Uses

For use on apples, non-bearing pears, and non-bearing sweet cherries

Sublabel B: Ornamental Uses

For use on lilies

Active Ingredients:

Gibberellins A<sub>4</sub>A<sub>7</sub> ..... 1.8% w/w

N-(phenylmethyl)-1H-purine-6-amine ..... 1.8% w/w

Other Ingredients:..... 96.4% w/w

Total:..... 100.0% w/w

### KEEP OUT OF REACH OF CHILDREN

### CAUTION

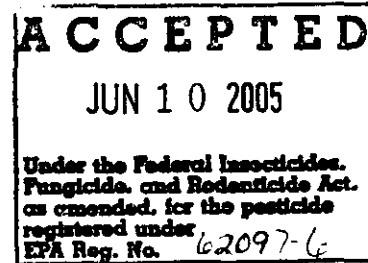
EPA Reg. No. 62097-6

EPA Est. No. 39578-TX-1

**NET CONTENTS: ½ Gallon (1.89 L)**

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Fine Agrochemicals Limited  
Hill End House, Whittington  
Worcester, WR5 2RQ  
United Kingdom



**SUBLABEL A: Agricultural Uses**

**PERLAN®**

**Plant growth regulator solution for use on apples, non-bearing pears, and non-bearing sweet cherries**

**Active Ingredients:**

Gibberellins A <sub>4</sub> A <sub>7</sub> .....	1.8%
N-(phenylmethyl)-1H-purine-6-amine .....	1.8%
Other ingredients:.....	96.4%
Total: .....	100.0%

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**NET CONTENTS: ½ Gallon (1.89 L)**

<b>FIRST AID</b>	
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-858-7378 (National Pesticide Information Center) for emergency medical treatment information.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION. Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical-resistance selection chart.

Applicators and other handlers must wear:

- \* Long-sleeved shirt and long pants.
- \* Chemical-resistant gloves.
- \* Protective eyewear.
- \* Socks and shoes.
- \* Chemical-resistant apron when cleaning equipment, mixing or loading.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE items separately from other laundry.

#### **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Avoid drift on to non-target plants.

#### **PHYSICAL OR CHEMICAL HAZARDS**

FOR CHEMICAL EMERGENCY: spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State or Tribe, consult the State/Tribal agency responsible for pesticide regulation. Do not apply this product through any type of irrigation system.

#### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on the label about personal protective equipment (PPE) and restricted entry intervals. The requirements in this box only apply to uses of this product covered by the Worker Protection Standard.

Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as, plants, soil or water is:

- \* Long-sleeved shirt and long pants (or coveralls)
- \* Waterproof gloves
- \* Shoes plus socks

#### **PRODUCT INFORMATION**

- **Perlan** is a plant growth regulator for use on apples, non-bearing pears, and non-bearing sweet cherries.
- **Perlan** improves the shape ('typiness') of Delicious apples by increasing the development of calyx lobes and elongating the fruit.
- **Perlan** may increase fruit weight and yield in apples.
- **Perlan** can be used to increase lateral bud break on non-bearing trees.
- **Perlan** may cause some fruit thinning.

## SPRAYING GUIDE FOR FRUIT DEVELOPMENT

When used to improve the type and size of fruit, apply **Perlan** in a single or split spray program.

### All states except Washington

#### Single application

Make one application of 1 – 2 pints between early king bloom and early petal fall of side blossoms in 50 – 200 gallons of water/acre.

### Washington only

#### Single application

Make one application of 1 – 2 pints between early king bloom and early petal fall of king blossoms in 50 – 200 gallons of water/acre.

#### Split applications

Make the first application of 0.5 – 1.5 pints between early king bloom and early petal fall of king blossoms in 50 – 200 gallons of water/acre. Make the second application of 0.5 - 1 pint 7 – 21 days later in 50 – 200 gallons of water/acre.

#### Split applications in areas where bloom is prolonged

Make the first application of 0.5 – 1 pint during the first flush of bloom in 100 gallons of water/acre. Make the second application of 0.5 - 1 pint 3 – 7 days later when the rest of the tree comes into bloom in 100 gallons of water/acre.

- Apply all sprays as a fine mist to ensure maximum coverage and spray retention on flowers and foliage. Do not apply in water volumes greater than 200 gallons/acre.
- Direct 85% of spray to the upper  $\frac{2}{3}$ rds of the trees.
- Addition of a non-ionic wetting adjuvant may improve coverage and efficacy.
- Apply in conditions conducive of slow drying.
- Do not apply if air temperature is less than 40°F or more than 90°F.
- Do not apply more than 2 pints/acre/year.
- Prepare spraying solution using clean water and apply within 24 hours.
- Apply **Perlan** using conventional spray application machinery or as otherwise directed in this label. **Perlan** must not be applied using irrigation equipment.
- pH of the applied spray must not be higher than 8. Use a buffering agent if necessary.
- Efficacy of **Perlan** may be reduced if rain occurs within 6 hours of application.
- **Perlan** may be applied in fruit crops in tank mixture with Benlate®, Dithane®, Orthocide®, Polyram®, ferbam, thiram and wettable sulfur. Always refer to the partner product label when applying **Perlan** in tank mixtures and follow all precautions and directions given.

## SPRAYING GUIDE FOR FEATHERING AND TREE DEVELOPMENT

Application of **Perlan** can be used to increase lateral bud break and shoot growth to produce a better tree framework in young trees.

#### Foliar application to nursery and orchard apples

Make one application of 125 – 500 ppm ( $\frac{1}{4}$  - 1 pint/5 gallons of water) when orchard trees have 1 – 3 inches of new growth or nursery trees have reached the height where branching is required.

#### Foliar application to nursery and orchard pears or nursery sweet cherries

Make one application of 250 – 1000 ppm ( $\frac{1}{2}$  - 2 pints/5 gallons of water) when orchard trees have 1 – 3 inches of new growth or nursery trees have reached the height where branching is required.

- Add a non-ionic or buffered wetting adjuvant to the spray solution at 0.2% – 0.3% of water volume.

- Apply using a hand held sprayer and ensure thorough wetting of foliage and bark.
- pH of the applied spray must not be higher than 8. Use a buffering agent if necessary.

Latex application to nursery and orchard apples or non-bearing orchard sweet cherries

Apply 5000 – 7500 ppm ( $\frac{1}{5}$  –  $\frac{1}{3}$  pint per pint of latex paint) to one-year-old wood in the spring when terminal buds begin to swell. Apply with a brush or sponge to achieve thorough coverage of bark.

- **Do not apply after buds break.**
- Add a non-ionic or buffered wetting adjuvant to the paint solution at 0.5% – 1.0% of water volume.
- Apply to one-year-old wood only.

### **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Keep containers tightly closed when not in use. Store below 75°F.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

FINE AGROCHEMICALS LIMITED warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions subject to the inherent risks set forth below.

FINE AGROCHEMICALS LIMITED makes no other expressed or implied warranty of merchantability or fitness for a particular purpose or any other expressed or implied warranty.

**INHERENT RISK OF USE:** It is impossible to eliminate all risks associated with this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label) abnormal conditions, presence of other materials, the manner of application, or other factors, all of which are beyond the control of FINE AGROCHEMICALS LIMITED or the seller.

Perlan<sup>®</sup> is a registered trademark of Fine Agrochemicals Limited.

Benlate<sup>®</sup> is a registered trademark of E.I duPont de Nemours & Co., Inc.

Dithane<sup>®</sup> is a registered trademark of Rohm and Haas Company.

Orthocide<sup>®</sup> is a registered trademark of Chevron Chemical Co.

Polyram<sup>®</sup> is a registered trademark of BASF AG.

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**SUBLABEL B: Ornamental Uses**

**FRESCO™**

**Plant growth regulator solution for use on lilies**

Active Ingredients:

Gibberellins A <sub>4</sub> A <sub>7</sub> .....	1.8%
N-(phenylmethyl)-1H-purine-6-amine .....	1.8%
Other Ingredients:.....	96.4%
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- \* Waterproof gloves
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#### **PRODUCT INFORMATION**

- **Fresco** is a highly potent plant growth regulator for use on lilies.
- **Fresco** can be used on Easter (*Lilium longiflorum*), LA Hybrid (*L. longiflorum*-Asiatic crosses) and Oriental lilies.
- **Fresco** delays leaf yellowing and necrosis of lower leaves when applied to lower leaves. It delays flower senescence when applied to flower buds.
- **Fresco** cannot be used to correct leaf yellowing and flower senescence.

**SPRAY PREPARATION GUIDE**

When the appropriate rate of Fresco has been chosen, half fill the cleaned tank with clean water. Add the specified quantity of Fresco and then fill the tank with the final quantity of water required.

The optimum rate of **Fresco** depends upon species, variety, plant structure and leaf surface, but also physical and environmental variables. Growers must conduct trials with small numbers of plants before treating commercial crops. Start at the lower rates and work up to a rate that gives the desired effect. Apply **Fresco** using conventional spraying equipment at low to medium pressures for **complete coverage**.

**Rate Conversion Table**

Parts Per Million GA <sub>4/7</sub> /BA (PPM)	ml/L	ml/Gallon	Fluid Ounce/Gallon
1/1	0.06	0.2	0.007
5/5	0.3	1.1	0.04
10/10	0.6	2.1	0.07
25/25	1.4	5.3	0.18
50/50	2.8	10.5	0.36
75/75	4.2	15.8	0.53
100/100	5.5	21.0	0.71

- Apply **Fresco** as a directed foliar spray only.
- Apply only as foliar applications. Typically apply 2 quarts of spray solution uniformly over 100 sq. ft of bench area.
- **Fresco** is best applied in the morning or late afternoon/evening, when plants are not under drought stress.
- Do not apply **Fresco** to plants under stress from water, pest or nutritional disorders.
- Do not apply more than 15ml of spray solution per plant.
- Do not apply **Fresco** over-rate, to the soil, or young foliage as this may cause stem elongation.
- Do not apply **Fresco** in tank mixture with any other product.
- Do not reuse soil from plants treated with **Fresco**.
- Be careful in measuring, diluting, and applying **Fresco**.
- **Fresco** must not be applied to any food crop.

**PREVENTION OF LOWER LEAF YELLOWING IN EASTER AND LA HYBRID LILIES**

Early and Mid-season applications

To reduce yellowing of glasshouse produced plants.

Apply 5/5 – 10/10 (GA4/7-BA) as a directed spray to the **lower leaves only**, 7 to 10 days before the visible bud stage is reached.

A second repeat application is needed for complete season control applied 7 to 10 days after the visible bud stage.

Do not allow coverage of immature leaves as this may result in unwanted stem elongation.



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Late-season application

To reduce leaf yellowing and prolong flowering during and after shipment.

Apply 100/100 (GA4/7/BA) when the first bud is at least 8cm long and there is less than 14 days to readiness for shipping the crop or removal to the cooler. Apply to the foliage and flower buds.

Treatment in this way will provide up to 14 days protection from yellowing and 25% longer flower life.

Do not treat earlier than 14 days before shipping or removal to the cooler as adequate protection may not occur.

Do not treat lilies with small buds as this may result in unwanted stem elongation.

**PREVENTION OF LOWER LEAF YELLOWING IN ORIENTAL LILIES**

Early and Mid-season applications

To reduce yellowing of glasshouse produced plants.

Apply 100/100 (GA4/7-BA) as a directed spray to the **lower leaves only**, 7 to 10 days before or after the visible bud stage is reached.

The first application gives up to 21 days protection. A repeat application is needed for complete season control no earlier than 14 days before shipping or removal to the cooler.

Late-season application

To reduce leaf yellowing and prolong flowering during and after shipment.

Apply 100/100 (GA4/7/BA) when there is less than 14 days to readiness for shipping the crop or removal to the cooler. Apply to the foliage and flower buds.

Do not treat earlier than 14 days before shipping or removal to the cooler as adequate protection may not occur.

Protection lasts for up to 14 days after removal to the cooler.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Keep containers tightly closed when not in use. Store below 75°F.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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the label) abnormal conditions, presence of other materials, the manner of application, or other factors, all of which are beyond the control of FINE AGROCHEMICALS LIMITED or the seller.

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