

PERLAN®
Plant Growth Regulator Solution

Active Ingredients	
Gibberellins A ₄ A ₇	1.8%
N-(phenylmethyl)-1H-purine-6-amine	1.8%
Inert Ingredients	<u>96.4%</u>
TOTAL	100%

EPA Reg. No. 62097-6
 EPA Est. No.

Net Contents:

KEEP OUT OF REACH OF CHILDREN

WARNING - AVISIO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

STATEMENT OF PRACTICAL TREATMENT

- If in eyes:** Flush with plenty of water. Call a physician.
- If swallowed:** Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, large quantities of water. Avoid alcohol.
- If on skin:** Wash with plenty of soap and water. Get medical attention if irritation persists.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes eye irritation. Do not get in eyes. Harmful if swallowed

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:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Respiratory protection devices
- Protective eyewear
- 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

- Wash hands before eating, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or 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.

PHYSICAL AND CHEMICAL HAZARDS

Flammable. Keep away from heat and open flame.

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 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

ACCEPTED
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 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 62097-6

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 level (REI) of 12 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
- Protective eye wear

STORAGE AND DISPOSAL

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

Storage: Keep containers tightly closed when not in use.

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

Container Disposal: Do not reuse empty containers. Triple rinse (or equivalent). Then puncture and dispose of in sanitary landfill or by incineration, if allowed by State and local authorities. If burned, stay out of smoke.

GENERAL INFORMATION

Do not apply this product through any type of irrigation system. PERLAN® is a plant growth regulator for use on apples. When applied as directed, PERLAN® will give the following responses.

- PERLAN® improves the shape of Delicious apples through elongation of fruit and development of more prominent calyx lobes. These desirable effects will be more evident in years when typiness is limited.
- On Delicious and other varieties, PERLAN® may increase weight of individual fruit and yield per tree. Some fruit thinning may occur from the use of PERLAN®.
- On most apple varieties PERLAN® will increase lateral bud break, shoot growth, and improve branch angle on non-bearing fruit trees, including nursery stock. This effect

will provide a better tree framework for early cropping.

SPRAY GUIDELINES FOR FRUIT DEVELOPMENT

Single application for improved type:

For all states except Washington, Oregon, Idaho and Utah

A single application of 1 to 2 pints of PERLAN® in 50 to 200 gallons water per acre applied as a fine mist spray should be made from early king bloom (king blossoms opening and side blossoms in the balloon stage) to the early stage of petal fall of the side blossoms.

For the states of Washington, Oregon, Idaho and Utah

A single application of 1 to 2 pints of PERLAN® in 50 to 200 gallons water per acre applied as a fine mist spray should be made from early king bloom (king blossoms opening and side blossoms in the balloon stage) to the early stage of petal fall of the king blossoms.

Split applications for improved type and size:

A split application may be utilized to improve typing and sizing responses. The first application should be made from early king bloom to the early stage of petal fall of the king blossoms. The second application should be made 7 to 21 days later. Apply ½ to 1 pint of PERLAN® in 50 to 200 gallons water per acre applied as a fine mist spray in each application. Do not exceed a total of 2 pints of PERLAN® per acre in total.

Split applications for improved type in locations where the bloom period is prolonged or occurs over a period of several days:

Apply 2 sprays of ½ to 1 pint of PERLAN® in 100 gallons water per acre to the portions of the tree canopy in bloom with the sprayer calibrated to deliver 100 gallons per acre. An appropriate wetting agent should be added to the spray to ensure thorough coverage of open blooms. The first spray should be made during the first flush of bloom; the second spray should be made when the remainder of the tree canopy comes into bloom, normally 3 to 7 days after the first spray. For the most efficient use of PERLAN®, the orchard should be assessed at least every 2 days for bloom progression.

MIXING INSTRUCTIONS

Add the required amount of PERLAN® to a CLEAN spray tank half full with water. Agitate

tank while filling with water to the required level. PERLAN® spray solutions should be used within 24 hours of mixing. A non-ionic wetting agent such as Tween®-20 or Triton® X-100 may improve spray coverage and absorption.

APPLICATION CONSIDERATIONS

PERLAN® is a plant growth regulator which must be absorbed by the plant to be effective. Optimum results will be achieved on vigorous, healthy trees when sprayed under good absorption conditions. High relative humidity and slow drying conditions favor maximum absorption.

- Do not apply to low vigor trees or trees under stress from drought, winter injury, etc.
- Apply as a uniform fine mist spray so that 85% of the spray volume is directed into the upper 2/3 of the trees under calm weather conditions.
- Use a properly calibrated sprayer that ensures uniform and complete coverage of all foliage and blossoms. Spray volume should be adjusted to tree size and density. Do not apply more than 200 gallons per acre.
- Do not apply when the air temperature is lower than 40° F or greater than 90° F. Rapid drying conditions should be avoided. Applications in the mornings or evenings may be preferable. Rainfall within 6 hours of application may reduce the expected response of PERLAN®.

SPRAY GUIDELINES FOR LATERAL BRANCHING & TREE DEVELOPMENT

A single foliar application of PERLAN® or a PERLAN®-latex paint spot application may be applied to apples, non-bearing pear trees and non-bearing sweet cherry trees, including nursery stock, to increase lateral bud break, shoot growth, improve branch angles, and provide a better tree framework for early cropping.

Foliar applications: Foliar applications increase bud break and branch angles on apple, non-bearing pear and sweet cherry trees (nursery stock only).

- **Apples (Nursery and Orchard):** Apply 125 - 500 ppm (1/4 - 1 pint per 5 gallons of spray) when the trees have 1 - 3 inches of new terminal growth.

- **Non-bearing Pears (Nursery and Orchard)* and Sweet Cherries (Nursery):** Apply 250 - 1000 ppm (1/2 - 2 pints per 5 gallons of spray) when nursery trees have reached the terminal height at which lateral branching is desired.

A buffered wetting agent, e.g., Buffer X®, or non-ionic wetting agent such as Tween®-20 or Triton® X-100 should be added to the tank at a rate of 0.2 - 0.3% (1 - 2 oz. per 5 gallons water) prior to the addition of PERLAN®. The pH of the spray solution should not more than 8.

Uniformly apply PERLAN® with a pressurized hand-sprayer, hand-gun attached to an airblast sprayer, or an airblast sprayer to thoroughly wet the bark and foliage. Typically 50 to 100 gallons of spray will treat an acre of nursery trees planted at 2200 trees per acre.

Later applications: Latex applications increase bud break and branch angles when applied to one year old wood on apples and orchard-grown non-bearing sweet cherries.

- **Apples (Nursery and Orchard) and Sweet Cherries (Orchard only):** Apply 5000 - 7500 ppm (1/5 - 3/8 pint PERLAN® per pint of latex paint) in the spring when terminal buds begin to swell but before shoots emerge.

NOTE: Do not apply after buds break. Applications after buds have broken may cause injury to tender shoot tips and fail to promote shoot growth from that point. A buffered or non-ionic wetting agent should be added to the latex paint at a rate of 0.5 - 1.0% (0.1 - 0.15 oz.) per pint of paint prior to the addition of PERLAN® in order to improve the dispersion of the PERLAN® in the paint and its absorption through the bark surface. Uniformly apply the PERLAN®-latex paint mixture with a brush or sponge to thoroughly cover the bark surface.

NOTE: Apply to one year old wood only.
*All states except California

COMPATABILITY

PERLAN® may be applied in combination with plant nutrients. A buffer should be added to alkaline spray water to reduce the pH below 8. The following fungicides may be tank-mixed with PERLAN® at the recommended timing associated with bloom applications of PERLAN®: Benlate®, Ferbam®, Polyram®, Dithane® M-45, Orthocide®, thiram and wettable sulfur. When using fungicides, refer to

their respective labels for directions and precautionary statements.

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. All such risks shall be assumed by the buyer.

PERLAN® is a registered Trademark of Fine Agrochemicals Limited. Benlate®, Ferbam®, Polyram®, Dithane®, Orthocide®, Triton®, Tween® and Buffer-X® are registered trademarks of companies other than Fine Agrochemicals Limited.

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