

55146-85

1-31-2000

1/7

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Biopesticides and Pollution Prevention Division  
(7511C) 401 M St., S.W.  
Washington, D.C. 20460

EPA Reg.  
Number:

55146-85

Date of Issuance:

JAN 31 2000

## NOTICE OF PESTICIDE:

  X   Registration  
      Reregistration

(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Agtrol International  
TypRus™

Name and Address of Registrant (include ZIP Code):

Agtrol International  
7322 S.W. Freeway, Suite 1400  
Houston, TX 77074

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA sec. 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA section 3(c)(2)(B) and section 4 when the Agency requires all registrants of similar products to submit such data.

2. Make the following label changes before you release the product for shipment:

a. Revise the label by changing "EPA Reg. No. 55146-XX" to "EPA Reg. No. 55146-85."

b. Ensure that the label bears an EPA Est. No. entry.

## CONCURRENCES

SYMBOL	Signature of Approving Official	7511C	75114	Date			
		Greenway	Reilly	1/24/00	1/24/00		
DATE	EPA Form 8570-6						

2/7

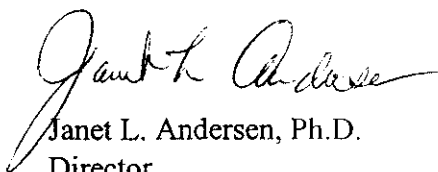
Page 2  
EPA Reg. No. 55146-85

3. Submit two (2) copies of the revised final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely,



Janet L. Andersen, Ph.D.  
Director  
Biopesticides and Pollution  
Prevention Division (7511C)

Enclosure

DGreenway/308-8263/1-24-00/regnot55146-85.wpd/GA4GA7

3/7

# AGTROL INTERNATIONAL

**TypRus™**

Plant Growth Regulator Solution

For use to suppress fruit russeting in apples and suppression of cracking on Stayman apples.

**ACTIVE INGREDIENT:**

Gibberellins A<sub>4</sub>A<sub>7</sub> ..... 2.0% w/w

**OTHER INGREDIENT:** ..... 98.0% w/w

**TOTAL** ..... 100.0% w/w

(Contains 21 grams active ingredient per liter or 9.93 grams per pint)

**KEEP OUT OF REACH OF CHILDREN**

**WARNING-AVISO**

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

**FIRST AID**

**If in Eyes:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

**If on Skin:** Wash with plenty of soap and water. Get medical attention.

**If Swallowed:** Call a doctor or get medical attention. Do not induce vomiting or give anything by mouth to an unconscious person. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

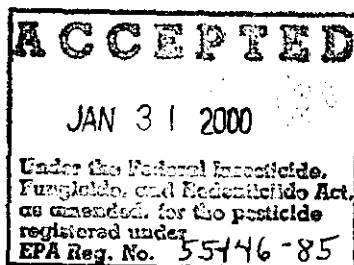
**Note to Physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

Agtrol International  
Houston, TX USA 77074

EPA Reg. No. 55146-XX

EPA Est. No.

Net Contents:



**PRECAUTIONARY STATEMENTS**  
**HAZARD TO HUMANS (AND DOMESTIC ANIMALS)**

**WARNING - AVISO**

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Wear protective eyewear (goggles or face shield). Do not get in eyes or on clothing. Avoid contact with skin. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash 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 category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves, such as barrier laminate; butyl, nitrile, or neoprene rubber; polyvinyl chloride (PVC); or viton
- Shoes plus socks
- Protective eye wear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**User Safety Recommendations**

User 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 or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

**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 requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**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 this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (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:

- Coveralls
- Chemical resistant gloves, such as barrier laminate; butyl, nitrile, or neoprene rubber; polyvinyl chloride (PVC); or viton
- Shoes plus socks
- Protective eye wear

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store below 77°F (25°C). Keep containers tightly closed when not in use.

**Pesticide Disposal:** Wastes resulting from use of this product may 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 a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### APPLICATION INSTRUCTIONS

Do not apply this product through any type of irrigation system.

#### Fruit Russet Suppression in Apples

TypRus™ is a plant growth regulator containing gibberellins A<sub>4</sub>A<sub>7</sub> which may reduce the development of physiological fruit russeting in apples when applied in a post-bloom spray program. Used in years when russet conditions are present, TypRus may boost overall fresh market grades of the crop. Physiological russeting is generally associated with the presence of water on the fruit surface during the first 30 to 40 days of fruit development. Russet severity at a given location is therefore specifically influenced by the weather conditions during and following the bloom period. The key conditions influencing russet include precipitation, humidity, and temperature. TypRus may act only on that russet caused by climatic factors active early in fruit development and will not reduce damage associated with mechanical forces such as limb or pedicel rub, insect damage, or russet produced by certain pesticides.

#### Application Rate

Apply 26 to 40 fluid ounces per acre for a total seasonal rate.

#### Timing of Application

Apply TypRus as two to four consecutive sprays beginning at petal fall, and continuing at 7 to 10 day intervals. This spray timing corresponds to the most sensitive russet development period shown to occur in apples.

**Method of Application**

Apply 10 fluid ounces\* (15 ppm) to 13 fluid ounces (20 ppm) of TypRus in 100 gallons of water per acre, per application for 2 to 4 total applications. Number and rate of applications should be based on both tree size and local weather conditions. In general, as tree size and overall rainfall increase, the number and rate of applications should be increased. This increase is necessary to maintain adequate coverage of the developing fruit surface during the most sensitive russet period.

**NOTE:** No more than 40 fluid ounces of TypRus should be applied per season.

\*Best russet control may be expected with four 10 fluid ounce (15 ppm) per acre applications of TypRus.

**Application Considerations**

Do not use with spray surfactants, spreader stickers, etc. since these materials have been shown to induce russet.

Do not use in excessive spray volume, (i.e. greater than 100 gal/acre) since excess moisture has been shown to induce russet.

Use a properly calibrated and adjusted sprayer that insures uniform and complete coverage of all foliage and fruitlets.

Approximately 85% of the spray volume should be directed into the upper two-thirds of the trees.

To minimize excessive spray drift, apply when air is calm.

Rainfall within six hours after spraying may reduce activity of TypRus.

TypRus may be applied in combination with other materials; refer to respective labels for directions and precautionary statements.

**PREHARVEST FRUIT CRACKING SUPPRESSION IN STAYMAN APPLES**

**NOTE:** Stayman apples that have received TypRus application to suppress russet may not be treated for cracking suppression during the same growing season. TypRus is a plant growth regulator containing gibberellins A<sub>4</sub> and A<sub>7</sub>. This material has been shown to suppress preharvest fruit cracking of 'Stayman' apples when used as directed. TypRus must be applied at least two to three weeks before any fruit cracking is observed in the orchard. Past history of cracking irritation may serve as a guide to when the first application should be made. If the material is applied after cracking has started, effectiveness of the product will be greatly reduced. Since cracking can occur over an extended period of time, multiple applications are required. Many factors influence fruit cracking in 'Stayman' apples. TypRus is one component of a total management program.

**Application Rate and Timing**

Apply 16 to 32 fluid ounces of TypRus per acre per application. Higher application rates may provide better suppression of cracking.

**Timing of Application**

Apply TypRus in three to six consecutive sprays beginning at least 2 to 3 weeks before fruit cracking is likely to be observed in the orchard. Depending on geographical location and other factors influencing fruit cracking, the initial application should typically be made between mid-June and mid-July. Intervals between sprays should be 14 to 21 days. Best cracking suppression may be expected when at least four consecutive sprays are applied at 14 to 21 day intervals. When conditions favor heavy cracking, better results may be obtained by using the higher specified rates, the greater specified number of applications, and the closer specified spray intervals.

**Method of Application**

Apply material using conventional spray equipment. Use sufficient water volume to obtain good coverage of the fruit surface. Apply as a complete spray (i.e. treat every row middle).

**Application Considerations**

Use of a nonionic wetting agent approved for use on food will improve spray coverage and enhance absorption. Since TypRus must be absorbed to be effective, best performance can be expected with good absorption conditions and healthy trees. High relative humidity and slow drying conditions favor maximum absorption of TypRus. Application in morning or evening may be preferable. Conditions favoring rapid drying of spray deposits should be avoided.

Use a properly calibrated and adjusted sprayer that insures uniform and complete coverage of all foliage and fruit. Spray volume should be adjusted to tree size and density. Do not use excessive spray volumes since excess moisture may increase the potential for fruit cracking. Approximately 85% of the spray volume should be directed into the upper two-thirds of the trees.

Rainfall within six hours after spraying may reduce activity of TypRus. TypRus may be tank-mixed with most common pesticides labeled for use on apples.

**WARRANTY STATEMENT**

AGTROL INTERNATIONAL warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes set forth on the label when used according to directions under normal use conditions. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. This warranty does not extend to the handling or use of this product contrary to label instructions or under abnormal conditions or under conditions not reasonably foreseeable to seller and buyer assumes all risk of any such use.