



SPECIALTY



## TypRus™

### Plant Growth Regulator Solution

#### Active Ingredient:

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

OTHER INGREDIENTS: .....98.0% w/w

TOTAL .....100.0% w/w

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

EPA Reg No. 55146-85

EPA EST. No.65663-TX-01

KEEP OUT OF REACH OF CHILDREN

### WARNING - AVISO

Si usted no entiende la etiqueta, busque a alguien por 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 eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container with you when calling a poison control center or doctor, or going for treatment advice. You may also contact 1-877-325-1840 for 24 Hour emergency medical treatment information

# ACCEPTED

OCT 0 6 2004

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 55146-85

SEE INSIDE FOR ADDITIONAL  
PRECAUTIONARY STATEMENTS

Net Content:



1333 Burr Ridge Parkway, Suite 125A  
Burr Ridge, IL 60527

Nufarm Agriculture Division



**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 or rinsate.

## 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 state or tribal 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 worn over short-sleeved shirt and short pants.
- Chemical resistant gloves, such as barrier laminate; butyl, nitrile, or neoprene rubber; polyvinyl chloride (PVC); or viton
- Shoes plus socks
- Protective eye wear

## 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 can reduce the development of physiological fruit russetting 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 russetting 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 must be based on both tree size and local weather conditions. In general, as tree size and overall rainfall increase, increase the number of applications.

This increase is necessary to maintain adequate coverage of the developing fruit surface during the most sensitive russet period.

**NOTE:** Do not apply more than 40 fluid ounces of TYPRUS per season.

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

### Application Considerations

- 1.) Do not use with spray surfactants, spreader stickers, etc. since these materials have been shown to induce russet.
- 2.) Do not use in excessive spray volume, (i.e. greater than 100 gal/acre) since excess moisture has been shown to induce russet.
- 3.) Use a properly calibrated and adjusted sprayer that insures uniform and complete coverage of all foliage and fruitlets.
- 4.) Approximately 85% of the spray volume must be directed into the upper two-thirds of the trees.

- 5.) To minimize excessive spray drift, apply when air is calm.
- 6.) Rainfall within six hours after spraying can reduce activity of TYPRUS.
- 7.) TYPRUS can be applied in combination with other materials; refer to respective labels for directions and precautionary statements.

### **PREHARVEST FRUIT CRACKING SUPPRESSION IN STAYMAN APPLES**

**NOTE: Do not treat** Stayman apples that have received TYPRUS application to suppress russet 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 can 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 will 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, make the initial application between mid-June and mid-July. Apply subsequent sprays at 14 to 21 days. Best cracking suppression can be expected when at least four consecutive sprays are applied at 14 to 21 day intervals. When conditions favor heavy cracking, better results can 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**

- 1.) Use of a nonionic wetting agent approved for use on food will improve spray coverage and enhance absorption.
- 2.) 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 are preferable. Avoid conditions favoring rapid drying of spray deposits.
- 3.) Use a properly calibrated and adjusted sprayer that insures uniform and complete coverage of all foliage and fruit. Spray volume must be adjusted to tree size and density.
- 4.) Do not use excessive spray volumes since excess moisture can increase the potential for fruit cracking.
- 5.) Approximately 85% of the spray volume must be directed into the upper two-thirds of the trees.
- 6.) Rainfall within six hours after spraying can reduce activity of TYPRUS.
- 7.) TYPRUS may be tank-mixed with most common pesticides labeled for use on apples.

### 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 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 a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### WARRANTY STATEMENT

Nufarm Americas Inc. 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.

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