

# Talus® 70DF

Insect Growth Regulator

SPECIMEN



GROUP 16 INSECTICIDE

**Active Ingredient**

Buprofezin:

2-tert-butylimino-3-isopropyl-5-phenyl-1,3,5-thiadiazinan-4-one ..... 70.0%

**Other Ingredients** ..... 30.0%

**TOTAL** ..... 100.0%

Contains 0.70 lb buprofezin per pound of product.

**Keep Out of Reach of Children**

## CAUTION / PRECAUCIÓN

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.)

Refer to inside of label booklet for additional precautionary information and Directions for Use including First Aid and Storage and Disposal.

**NOTICE:** Read the entire label before using. Use only according to label directions. Before buying or using this product, read Terms and Conditions of Use, Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies at end of label booklet.

Talus® is a trademark of Nichino America, Inc.  
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### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### KEEP OUT OF REACH OF CHILDREN

## CAUTION / PRECAUCIÓN

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

#### FIRST AID

<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further 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>
<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. 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 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 the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>

#### HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In case of emergency endangering health or the environment involving this product, call **INFOTRAC 1-800-535-5053**.

**NOTE TO PHYSICIAN:** There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants;
- Waterproof gloves; and
- Shoes plus socks.

Follow 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

**Users should:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

### ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### ENVIRONMENTAL HAZARDS

For terrestrial uses, 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 by cleaning of equipment or disposal 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 over long-sleeved shirt and long pants;
- Waterproof gloves; and
- Shoes and chemical-resistant footwear.

### NONAGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, or greenhouses. For other uses, including golf courses and other nonagricultural uses, do not enter treated areas without protective clothing until sprays have dried.

## GENERAL INFORMATION

Talus® 70DF insect growth regulator is effective against the nymph stages of whitefly, scales, psylla, mealybugs, planthoppers, and leafhoppers by inhibiting chitin biosynthesis, suppressing oviposition of adults, and reducing viability of eggs. Talus 70DF insect growth regulator is not an adulticide. Evidence of activity may be slower than typical contact insecticides as treated susceptible pests may remain alive on the plant for 3-7 days; however pests have stopped feeding and any feeding damage during this time is typically very low.

Talus 70DF insect growth regulator is not disruptive to beneficial insects and mites.

Talus 70DF insect growth regulator is a contact insecticide, so good spray coverage is necessary. Apply by ground or air in sufficient water volume. Orient nozzles to assure good coverage. Use of higher volume of water will assure better coverage, especially under adverse conditions such as hot, dry weather, and/or a dense canopy. The entire field should be treated. Apply when economic infestations occur based on local information.

Talus 70DF insect growth regulator is not for sale, sale into, distribution, and or use in Nassau and Suffolk counties of New York State.

## INSECTS CONTROLLED

**Whiteflies:** Ash whitefly; Bandedwing whitefly; Greenhouse whitefly; Silverleaf whitefly; Sweetpotato whitefly

**Mealybugs:** Citrus mealybug; Comstock mealybug; Gill's mealybug; Grape mealybug; Longtailed mealybug; Mexican mealybug; Obscure mealybug; Striped mealybug; Vine mealybug

**Leafhoppers and Planthoppers:** Brown planthopper, Cherry leafhopper; Eastern grape leafhopper; Glassy-winged sharpshooter; Potato leafhopper; Variegated leafhopper; Western grape leafhopper; White apple leafhopper

### **Pear Psylla**

#### **Scales:**

**Soft Scales:** Barnacle scale; Black scale; Brown soft scale; Citricola scale; False oleander scale; Hemispherical scale; Indian wax scale and other wax scales; Tessellated scale; White peach scale

**Armored Scales:** Boisduval scale; Cactus scale; California red scale; Coconut scale; Fern scale; Florida red scale; Oystershell scale; San Jose scale

**Margarodid scale:** Cottony cushion scale

## RESISTANCE MANAGEMENT

Talus 70DF insect growth regulator is classified by IRAC in Group 16 – chitin synthesis inhibitors, and is not known to be cross-resistant to other classes of insecticides. However, insect pests are known to develop resistance to products used repeatedly. Because resistance development cannot be predicted, the use of this product should conform to resistance management strategies established for the crop and use area. Such strategies may include rotating with insecticides with different modes of action. Consult your local pest control advisor or extension office for details. If resistance to this product develops in your area, it may not provide adequate control. If you experience difficulty with control, and resistance is a likely cause, consult your local state university horticultural specialist or local agricultural authorities for the best alternative method of control. To preserve the usefulness of Talus 70DF insect growth regulator, do not make more than two consecutive applications. Prior to subsequent applications, use an alternative chemistry with a different mode of action. Always consult your local crop advisor for the most appropriate control decision for your area. Resistance management strategies advise against applying rates lower than those recommended on the label.

**For greenhouses:** If another insect growth regulator with the same mode of action as a chitin synthesis inhibitor (i.e. cyromazine, diflubenzuron, and novaluron) has been used in the greenhouse within 28 days, do not apply Talus 70DF insect growth regulator as the first whitefly application.

## MIXING, LOADING, AND HANDLING INSTRUCTIONS

### SPECIFIC MIXING INSTRUCTIONS

**Talus 70DF insect growth regulator alone:** Fill spray tank with ¾ of the amount of water needed for the intended application and then turn on agitation. Pour recommended amount of product on the surface of water in the spray tank. Add the balance of the water to the spray tank with agitation running. Keep agitation running during filling and spraying operations. If spraying must be stopped before emptying the sprayer, resume agitation before spraying the remainder of the load.

**Talus 70DF insect growth regulator Tank Mixtures:** Follow all use directions as listed above under *Talus 70DF insect growth regulator Alone* with the following exception: after the Talus 70DF insect growth regulator is thoroughly mixed and the tank is ¾ full, add the recommended amount of wettable powder, soluble powder, flowable, emulsifiable concentrate, or soluble liquid product, **while maintaining agitation**. If a spray additive is needed, add a liquid fertilizer, surfactant, or crop oil concentrate to the spray tank at this time. Then continue adding water to the tank to achieve the desired level, while maintaining agitation.

**Talus 70DF Tank Mixtures with Products in Water-Soluble Packaging:** Follow all use directions as listed above under *Talus 70DF insect growth regulator Alone* with the following exception: add the desired number of water-soluble bags to the tank (if allowed by their label instructions) at the same time the Talus 70DF insect growth regulator is added. **Note:** If using products in water soluble packaging, do not tank mix with products that contain boron, chromium, or other micronutrients.

### APPLICATION DIRECTIONS

Applications should be made immediately after the spray solution is prepared. Thorough spray coverage is essential for effective control. Applications may be made with high or low volume spray equipment that provides thorough coverage of the plant. Apply with properly calibrated spray equipment. For best results, apply when pest populations are beginning to build, before reaching economic thresholds. Consult your local agricultural advisor, state cooperative extension service, or regional SePRO Corporation Representative for recommendations.

### USE RESTRICTIONS

- Do not apply this product through any type of irrigation system.
- Crop Rotational Restrictions

CROP	PLANTBACK TIMING
All crops registered for use with buprofezin	0 days following application
Leafy vegetables not registered for use with buprofezin	30 days following application
Cereal grains	30 days following application
All other crops	60 days following application

### USE PRECAUTIONS

- Apply in a minimum finished spray volume of 5 gallons per acre by air. For gallonage per acre by ground, refer to the Application Rate Chart.
- Phytotoxicity may occur in Asian pear varieties, normally limited to applications made prior to petal fall.

**APPLICATION RATE CHART FOR TALUS 70DF INSECT GROWTH REGULATOR**

CROP	PEST	FORMULATED PRODUCT/A (Rate Represented in Lbs)	DIRECTIONS FOR USE
<b>Greenhouse Tomatoes</b>	Leafhoppers Mealybugs Planthoppers	9 oz./A (0.56 lb/A) (0.40 lbs ai/acre)	<p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• For greenhouse tomatoes, apply by ground on 2 acre minimum with 20 gallons of water per acre.</li> <li>• Apply no more than two applications per growing cycle.</li> <li>• Allow at least 5 days between applications.</li> <li>• Do not apply more than 18.0 oz (1.12 lbs) per acre per growing cycle.</li> <li>• Pre-Harvest Interval (PHI): 1 day.</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Treatment should be applied when population level reaches economic threshold. Consult local and state agricultural authorities for details.</li> <li>• Apply in sufficient water to obtain complete coverage of all plant parts. Good coverage is essential.</li> <li>• Applications may be made with high volume, low volume or ultra low volume (thermal and non-thermal foggers, misters, etc.) ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.</li> </ul>
	Whiteflies	6.0 to 9 oz./A (0.38 to 0.56 lb/A) (0.20 to 0.40 lbs ai/acre)	
<b>Ornamental plants</b> in greenhouses; lath and shadehouses; nurseries; landscape ornamentals; ground covers; field- and container-grown ornamentals; non-bearing fruit and nut trees and vines in nurseries; Christmas trees	Leafhoppers Mealybugs Planthoppers	12.0 oz./A (0.75 lb/A) (0.53 lbs ai/acre)	<p><b>USE RESTRICTIONS</b></p> <ul style="list-style-type: none"> <li>• Make no more than two applications per crop per growing season.</li> <li>• Do not apply more than 28.0 oz (1.76 lbs) per acre per growing cycle.</li> </ul> <p><b>RECOMMENDATIONS</b></p> <ul style="list-style-type: none"> <li>• Applications may be made with high volume, low volume or ultra low volume (thermal and non-thermal foggers, misters, etc.) ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.</li> <li>• Apply the specified dosage as a foliar spray in sufficient water for complete, uniform coverage, including stems and underside of leaves. Spray to the point of runoff.</li> <li>• <b>Whitefly, Leafhopper, or Planthopper:</b> Make first application as soon as adult insects begin to appear.</li> <li>• <b>Mealybug:</b> Make first application as soon as insect activity is observed.</li> <li>• <b>Scale:</b> Make first application when crawlers are emerging.</li> <li>• If additional insecticide applications are required for control, use another class of chemistry or a different Insect Growth Regulator (IGR) with a different mode of action before making subsequent applications of buprofezin.</li> <li>• Consult local or state agricultural authorities for details concerning economic thresholds for each target pest.</li> </ul>
	Scales	14.0 oz./A (0.88 lb/A) (0.61 lbs ai/acre)	
	Whiteflies	6.0 oz./A (0.38 lb/A) (0.26 lbs ai/acre)	

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container, unopened, in a cool, dry place.

**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:** Nonrefillable container. Do no reuse or refill this container. Triple rinse (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, 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.

## TERMS AND CONDITIONS OF USE

If terms of the following *Warranty Disclaimer*, *Inherent Risks of Use*, and *Limitation of Remedies* are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under *Warranty Disclaimer*, *Inherent Risks of Use* and *Limitation of Remedies*.

## WARRANTY DISCLAIMER

SePRO Corporation warrants that the 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. SePRO CORPORATION MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

## INHERENT RISKS OF USE

It is impossible to eliminate all risks associated with use of 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 such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner or application, or other factors, all of which are beyond the control of SePRO Corporation as the seller. To the extent consistent with applicable law, all such risks shall be assumed by buyer.

## LIMITATION OF REMEDIES

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to, at SePRO Corporation's election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent consistent with applicable law, SePRO Corporation shall not be liable for losses or damages resulting from handling or use of this product unless SePRO Corporation is promptly notified of such losses or damages in writing. In no case shall SePRO Corporation be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of SePRO Corporation or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitations of Remedies in any manner.

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