June 9, 2023
2023-0700

GROUP	4A	INSECTICIDE

ASSAIL 30 SC Insecticide
Suspension Concentrate

COMMERCIAL - AGRICULTURAL

ACTIVE INGREDIENT: Acetamiprid……30%

Contains 1,2-benzisothiazolin-3-one at 0.0193%, 5-Chloro-2-methyl-4-isothiazolin-3-one at 0.00113% and 2-Methyl-4-isothiazolin-3-one at 0.00037% as preservatives.

Warning, contains the allergen soy.



Warning – Poison

READ THE LABEL AND BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

REGISTRATION NO. 34484 PEST CONTROL PRODUCTS ACT

Registered by:
NIPPON SODA CO., LTD
2-1,2 CHOME OHTEMACHI
CHIYODA-KU, TOKYO
100-8165
JAPAN
USA Contact Number: (212) 490-0350

Canadian Representative
Nailor Regulatory Consulting Inc.
935 Rosinke Drive
Kincardine, ON N2Z 2X3
(519) 829-5422

FOR TRANSPORTATION EMERGENCIES SUCH AS SPILLS, LEAKS OR FIRES, CALL 1-800-424-9300 (24 HOURS).

FOR MEDICAL EMERGENCIES CALL 1-866-673-6671 Rocky Mountain Poison Control Center

NET CONTENTS: 1 – 210 L

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed or inhaled. Avoid breathing vapours or spray mist. Avoid contact with eyes, skin or clothing. Keep out of reach of domestic animals. Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean up and repair. In addition, wear chemical-resistant headgear during open cab airblast application. Chemical-resistant headgear includes Sou'Wester hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection. Gloves are not required during application within a closed cab. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment. If no such instructions for washables, use detergent and hot water. Keep and wash personal protective equipment separately from other laundry. 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 personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity, such as houses, cottages, schools and recreational areas, is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

DO NOT apply by air.

Restricted Entry Interval (REI):
DO NOT enter or allow worker entry into treated areas during the intervals specified in the following table:

Crop	**Postapplication Activity**	**REI and/or PHI**
Crop Group 5: Brassica (Cole) Leafy Vegetables Group	Harvesting (hand, mechanical)	8 days
	Scouting	2 days
	All other activities	4 days
Crop subgroup 1C (potato), Crop group 4 (leafy vegetables except brassica), Crop subgroup 6B (succulent shelled pea and bean), Crop subgroup 13-07A (blackberries and raspberries), asparagus, edible podded pea, field tomatoes, field peppers, groundcherries, lowbush blueberries, rutabagas, seed alfalfa, strawberries and tobacco	Harvesting (hand, mechanical)	8 days
	All other activities	12 hours

Crop group 11: Pome fruits & Crop group 12: Stone fruits	Harvesting (hand, mechanical)	8 days
	Hand thinning	6 days
	All other activities	12 hours
Crop subgroup 13-07B: Bushberries	Harvesting (hand, mechanical)	8 days
	Hand pruning and thinning	2 days
	All other activities	12 hours
Grapes	Girdling or cane turning	13 days
	Harvesting (hand, mechanical)	8 days
	Thinning, hand pruning, tying, leaf pulling	5 days
	All other activities	12 hours
Sweet Corn	Hand harvesting	10 days
	All other activities	12 hours

ENVIRONMENTAL PRECAUTIONS:

TOXIC to aquatic organisms and to non-target terrestrial plants. Observe spray buffer zones under DIRECTIONS FOR USE.

Toxic to bees exposed to direct treatment, drift, or residues in flowering crops or weeds. DO NOT apply this product to flowering crops or weeds if bees are visiting the treatment area. Minimize spray drift to reduce harmful effects on bees in habitats close to application site.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with moderate to steep slope, compacted soil, or clay.
Avoid application when heavy rain is forecast.
Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

FIRST AID:

IF SWALLOWED: Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.
IF IN EYES: 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. Call a poison control centre 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 centre or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION:
Treat symptomatically.

STORAGE:
Store this product away from food or feed. Do not store in or around the home. Store unused product in a cool, ventilated, dry, locked area. Do not allow prolonged storage in areas where temperatures frequently exceed 46°C (115°F). Never transfer this product to another container for storage.

DISPOSAL:

For recyclable containers

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.

2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For returnable containers

DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For refillable containers

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

Booklet

GROUP	4A	INSECTICIDE

ASSAIL 30 SC Insecticide
Suspension Concentrate

COMMERCIAL - AGRICULTURAL

ACTIVE INGREDIENT: Acetamiprid……30%

Contains 1,2-benzisothiazolin-3-one at 0.0193%, 5-Chloro-2-methyl-4-isothiazolin-3-one at 0.00113% and 2-Methyl-4-isothiazolin-3-one at 0.00037% as preservatives.

Warning, contains the allergen soy.



Warning - Poison

READ THE LABEL AND BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

REGISTRATION NO. PEST CONTROL PRODUCTS ACT

Registered by:
NIPPON SODA CO., LTD
2-1,2 CHOME OHTEMACHI
CHIYODA-KU, TOKYO
100-8165
JAPAN
USA Contact Number: (212) 490-0350

Canadian Representative
Nailor Regulatory Consulting Inc.
12 Burke Court
Guelph, ON N1L 1J2
(519) 837-8704

FOR TRANSPORTATION EMERGENCIES SUCH AS SPILLS, LEAKS OR FIRES, CALL 1-800-424-9300 (24 HOURS).

FOR MEDICAL EMERGENCIES CALL 1-866-673-6671 Rocky Mountain Poison Control Center

NET CONTENTS: 1 – 210 L

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed or inhaled. Avoid breathing vapours or spray mist. Avoid contact with eyes, skin or clothing. Keep out of reach of domestic animals. Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean up and repair. In addition, wear chemical-resistant headgear during open cab airblast application. Chemical-resistant headgear includes Sou'Wester hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection. Gloves are not required during application within a closed cab.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment. If no such instructions for washables, use detergent and hot water. Keep and wash personal protective equipment separately from other laundry. 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 personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity, such as houses, cottages, schools and recreational areas, is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

DO NOT apply by air.

Restricted Entry Interval:

DO NOT enter or allow worker entry into treated areas during the intervals specified in the following table:

Crop	**Postapplication Activity**	**REI and/or PHI**
Crop Group 5: Brassica (Cole) Leafy Vegetables Group	Harvesting (hand, mechanical)	8 days
	Scouting	2 days
	All other activities	4 days
Crop subgroup 1C (potato), Crop group 4 (leafy vegetables except brassica), Crop subgroup 6B (succulent shelled pea and bean), Crop subgroup 13-07A (blackberries and raspberries), asparagus, edible podded pea, field tomatoes, field peppers, groundcherries,	Harvesting (hand, mechanical)	8 days
	All other activities	12 hours

lowbush blueberries, rutabagas, seed alfalfa, strawberries and tobacco		
Crop group 11: Pome fruits & Crop group 12: Stone fruits	Harvesting (hand, mechanical)	8 days
	Hand thinning	6 days
	All other activities	12 hours
Crop subgroup 13-07B: Bushberries	Harvesting (hand, mechanical)	8 days
	Hand pruning and thinning	2 days
	All other activities	12 hours
Grapes	Girdling or cane turning	13 days
	Harvesting (hand, mechanical)	8 days
	Thinning, hand pruning, tying, leaf pulling	5 days
	All other activities	12 hours
Sweet Corn	Hand harvesting	10 days
	All other activities	12 hours

ENVIRONMENTAL PRECAUTIONS:

TOXIC to aquatic organisms and to non-target terrestrial plants. Observe spray buffer zones under DIRECTIONS FOR USE.

Toxic to bees exposed to direct treatment, drift, or residues in flowering crops or weeds. DO NOT apply this product to flowering crops or weeds if bees are visiting the treatment area. Minimize spray drift to reduce harmful effects on bees in habitats close to application site.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

FIRST AID:

IF SWALLOWED: Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

IF IN EYES: 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. Call a poison control centre 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 centre or doctor for treatment advice.
IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION:
Treat symptomatically.

STORAGE:
Store this product away from food or feed. Do not store in or around the home. Store unused product in a cool, ventilated, dry, locked area. Do not allow prolonged storage in areas where temperatures frequently exceed 46°C (115°F). Never transfer this product to another container for storage.

DISPOSAL:

<u>For recyclable containers</u>

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.

2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

<u>For returnable containers</u>

DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

<u>For refillable containers</u>
For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

DIRECTIONS FOR USE:

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests. Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

METHOD OF APPLICATION: Applications can be made by ground equipment in all provinces.

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) fine classification. Boom height must be 60 cm or less above the crop or ground.

Airblast application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. **DO NOT** apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

Use Precautions
Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Specified spray buffer zones should be observed.

Operator Precautions
Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations for the groundboom application. All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing and vehicle cabs must be decontaminated regularly.

Product Specific Precautions
Read and understand the entire label before opening this product. If you have questions, call Belchim Crop Protection Canada at 1-866-613-3336 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

1. ASSAIL 30 SC Insecticide must comply with the volume rates of not less than 200 L/ha.
2. Effective swath width (as determined by boom width and spray volume overlaps) must be accurately maintained. Conduct tests to determine the effective swath width. (For example, the effective swath width may be less than one-half of the overall swath).
3. Orient nozzles to achieve desired minimum droplet density and maximum coverage.
4. Efficient track-marking is essential.

Spray buffer zones:

A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, rangelands, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of application	Spray Buffer Zones (metres) Required for the Protection of:	
	Aquatic Habitat	Terrestrial habitat
Field sprayer	20	2
Airblast	30	10

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

APPLICATION TIMING:

Begin application when insect populations reach recognized economic threshold levels. Consult the provincial extension service, or professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

MIXING INSTRUCTIONS

ROW CROPS

1. Fill tank ¼ full with the required amount of total spray volume of water.
2. Add ASSAIL 30 SC Insecticide at recommended rates for the pest and crop type and begin agitation.
3. Continue to fill tank.
4. Allow to mix in tank for 2 minutes or until thoroughly mixed before applying.

Apply a minimum finished spray volume of 200 L/ha by ground for potatoes unless otherwise directed under crop specific directions. For best results, it is important to obtain thorough and uniform spray coverage of the plant. Use higher dosage rates for heavy infestations, dense

foliage, or for control of adult Colorado potato beetle. The specific length of residual control depends on environmental factors, plant growth, dosage rate, and degree of insect infestation.

To clean the sprayer after use, drain and flush with water. Use rinsings on crop according to label instructions or dispose of in an approved manner (See Storage and Disposal).

ORCHARD AND VINEYARD CROPS

To achieve optimum pest control, it is important to obtain thorough and uniform spray coverage of the plant. Choose a finished spray volume appropriate for the size of tree or vine and amount of foliage that will provide thorough coverage throughout the canopy. For certain pests, also follow recommendations listed under specific crop directions.

Use higher dosage rates for heavy infestations or dense foliage. The specific length of residual control depends on environmental factors, plant growth, dosage rate, and degree of insect infestation.

To clean the sprayer after use, drain and flush with water. Use rinsings on crop according to label instructions or dispose of in an approved manner (See Storage and Disposal).

TANK MIXING

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Belchim Crop Protection Canada at 1-866-613-3336 for information before applying any tank mix that is not specifically recommended on this label.

INTEGRATED PEST MANAGEMENT (IPM) USE OF THIS PRODUCT

ASSAIL 30 SC Insecticide can be effectively utilized in IPM programs. ASSAIL 30 SC Insecticide has been shown to leave substantial populations of many beneficial insects and spiders after use. The lower rates allow for maximum beneficial survival and faster rebound of beneficial populations.

RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, Assail 30 SC contains a Group 4 insecticide. Any insect population may contain individuals naturally resistant to Assail 30 SC and other Group 4 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used

repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of Assail 30 SC or other Group 4 insecticides with different groups that control the same pests and avoid application of consecutive sprays of Assail 30 SC or other insecticides in the same group in a season.
- Use tank mixtures with insecticides from a different group that is effective on the target pest when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting and record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Belchim Crop Protection Canada at 1-866-613-3336 or at info.canada@belchim.com.

CROP GROUP 4:
LEAFY VEGETABLES (except brassica) GROUP

Spray Volume for Leafy Vegetables: Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
LEAFY VEGETABLES Amaranth leafy, Arugula, Cardoon, Celery, Celery (Chinese), Celtuce, Chervil, Chrysanthemum (edible leaved), Chrysanthemum (garland), Corn Salad, Cress (garland), Cress (upland), Dandelion leaves, Dock, Endive, Florence Fennel, Lettuce (head & leaf), Orach, Parsley leaves,	Aphids	115-175	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control. Use the high rate under heavy pest pressure. Do not make more than 5 applications per season. Do not apply more than once every 7 days. Do not exceed a total of 300 g active ingredient (880 mL product) per hectare per

Purslane (garden), Purslane (winter), Radicchio, Rhubarb, Spinach, Spinach (vine), Spinach (New Zealand), Swiss Chard			season. There are no rotational crop plant restrictions for this product. Ground application only.

CROP GROUP 5:
BRASSICA (COLE) LEAFY VEGETABLES GROUP

Spray Volume for Cole Crops: Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
COLE CROPS Broccoli, Broccoli (Chinese), Broccoli raab, Brussels Sprouts, Cabbage, Cabbage (Chinese, bok choy), Cabbage (Chinese, napa), Cabbage (Chinese mustard, gai choy), Cauliflower, Collards, Kale, Kohlrabi, Mustard Greens, Mustard Spinach, Rape Greens, Cavalo broccolo, Mizuna	Aphids	115-175	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.

RESTRICTIONS AND PRECAUTIONS: Cole Crops
- Do not make more than 5 applications per season.
- Do not apply more than once every 7 days.
- Do not exceed a total of 300 g active ingredient (880 mL of product) per hectare per season.
- There are no rotational crop plant back restrictions for this product.

FIELD TOMATO

Spray Volume for Fruiting Vegetables: Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Field Tomato	Aphids	115-175	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.
	Colorado Potato Beetle	80 - 165	
	Whitefly	245	Begin applications when whitefly adults appear prior to development of nymphs. Do not wait until heavy populations have become established. Make applications on a minimum 7-day interval as long as pest pressure continues. Whiteflies have shown a tendency to develop resistance. For resistance management purposes, alternating applications of different chemical classes reduces the potential for resistance development.
For any of the pests listed above, use the high rate under heavy pest pressure. Do not make more than 2 applications per crop year. Do not apply more than once every 7 days. Do not exceed a total of 168 g active ingredient (490 mL product) per hectare per season. There are no rotational crop plant back restrictions for this product. Ground application only.			

CROP GROUP 11:
POME FRUITS GROUP

Spray Volume for Pome Fruits: Apply in a minimum finished spray volume of 1000 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
POME FRUITS	Aphids	165-245	

Apple, Crabapple, Pear, Pear (oriental), Quince	Tentiform leafminer, Leafhopper	165	Begin applications when treatment thresholds have been reached. Adequate coverage is essential for optimum control. Application(s) for leafminer control should initially target peak egg hatch of the first generation and must be made before larvae reach the tissue feeding stage. Use of pheromone traps in conjunction with degree days are good indicators that can be used to determine leafminer and codling moth sprays. Consult your local extension service for recommendations.
	Codling moth	245-490	
	Psylla (pear)	165-330	
For any of the pests listed above, use the high rate under heavy pest pressure. Do not make more than 4 applications per season. Do not apply more than once every 12 days. Do not exceed a total of 672 g active ingredient (1.97 L product) per ha per season. Do not apply during bloom. Ground application only.			

CROP SUBGROUP 1-C:
POTATO

Spray Volume for Potatoes: Ground application – apply in a minimum finished spray volume of 200 L/ha.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Potato	Aphids	115 - 175	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control. Use the higher rates when the majority of the Colorado Potato Beetle population is in the adult stage and for heavy pest pressure.
	Colorado Potato Beetle	80 - 165	

Do not make more than 2 applications per crop year.
Do not apply more than once every 7 days.
Do not exceed a total of 120 g active ingredient (350 mL product) per hectare per season.
There are no rotational crop plant restrictions for this product.

TOBACCO

Spray Volume for Tobacco: Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Tobacco	Aphids	115 - 175	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control. Use higher rates under heavy pest pressure.
Do not make more than 2 applications per year. Do not apply more than once every 7 days. Do not exceed a total of 120 g active ingredient (350 mL product) per hectare per season. There are no rotational crop plant restrictions for this product. Ground application only.			

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Nippon Soda Co. Ltd. under the User Requested Minor Use Label Expansion program. For these uses, Nippon Soda Co. Ltd. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

FOR SALE FOR USE FOR THE CONTROL OF SWEDE MIDGE ON BRASSICA LEAFY VEGETABLES (CROP GROUP 5):
Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
COLE CROPS Broccoli, Broccoli (Chinese), Broccoli raab, Brussels Sprouts, Cabbage, Cabbage (Chinese, bok choy), Cabbage (Chinese, napa), Cabbage (Chinese mustard, gai choy), Cauliflower, Collards, Kale, Kohlrabi, Mustard Greens, Mustard Spinach, Rape Greens	Swede Midge	175	Apply sufficiently for thorough coverage. Thorough and uniform spray coverage are important to obtain optimum control. Begin applications when treatment thresholds have been reached, as determined by local monitoring.

Do not make more than 5 applications per season.
Do not apply more than once every 7 days.
Do not exceed a total of 300 g active ingredient (880 mL product) per hectare per season.
There are no rotational crop plant back restrictions for this product.
Ground application only.

FOR SALE FOR USE FOR THE CONTROL OF ORIENTAL FRUIT MOTH (OFM) ON POME FRUITS (CROP GROUP 11) IN ONTARIO ONLY:
Apply in a minimum finished spray volume of 1000 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
POME FRUITS Apple, Crabapple, Pear, Pear (oriental), Quince	Oriental Fruit Moth	245 - 490	Begin applications when treatment threshold has been reached as indicated by monitoring with pheromone traps in conjunction with degree days. Consult your local extension specialist for advice. Adequate spray coverage is essential for optimum control. The emergence of 3rd or 4th generation of OFM are less synchronized than the 1st and 2nd generations. Alternate with other insecticide for 3rd or 4th generations to delay the insecticide resistance development in the pest populations.

RESTRICTIONS AND PRECAUTIONS: Pome Fruits (ORIENTAL FRUIT MOTH):
Applications timed for other pests may reduce the number of applications for this pest.

For any of the pests listed above, use the high rate under heavy pest pressure.
Do not make more than 4 applications per season.
Do not apply more than once every 12 days.
Do not exceed a total of 672 g active ingredient (1.97 L of product) per ha per season.
Do not apply during bloom.
Ground application only.

FOR SALE FOR USE FOR THE REDUCTION OF DAMAGE CAUSED BY PEA LEAFMINER (*Liriomyza huidobrensis* Blanchard) ON LEAFY VEGETABLES (CROP GROUP 4) AND LEAFY BRASSICA GREENS (CROP GROUP 5B):
Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
LEAFY VEGETABLES (Crop Group 4: leafy amaranth, arugula, cardoon, celery, celery (Chinese), celtuce, chervil, chrysanthemum (edible-leaved), chrysanthemum (garland), corn salad, cress (garland), cress (upland), dandelion leaves, dock, endive, Florence fennel, lettuce (head & leaf), orach, parsley leaves, purslane (garden), purslane (winter), radicchio, rhubarb, spinach, spinach (vine), spinach (new zealand), Swiss chard LEAFY BRASSICA GREENS (Crop Group 5B: broccoli raab, Chinese cabbage (bok choy), collards, kale, mizuna, mustard greens, mustard spinach, rape greens)	Pea Leafminer	175	Begin application when insect populations reach recognized economic threshold levels. Consult the provincial extension service, or professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area. Adequate spray coverage is essential for optimum control.
Do not make more than 5 applications per season. Do not apply more than once every 7 days. Do not exceed a total of 300 g active ingredient (880 mL of product) per ha per season. Applications timed for other pests may reduce the number of applications for this pest. There are no rotational crop plant restrictions for this product. Ground application only.			
FOR SALE FOR USE FOR THE CONTROL OF APHIDS ON GROUND CHERRY: Apply in a minimum finished spray volume of 200 L/ha by ground.			
SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Ground Cherry	Aphids	115 - 175	Begin application when insect populations reach recognized economic threshold levels. Consult the provincial extension service, or

			professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area. Adequate spray coverage is essential for optimum control.

Use the high rate under heavy pressure.
Do not make more than 4 applications per season.
Do not apply more than once every 7 days.
Do not exceed a total of 240 g active ingredient (700 mL of product) per ha per season.
Applications timed for other pests may reduce the number of applications for this pest.
There are no rotational crop plant restrictions for this product.
See Directions For Use for appropriate spray buffer zones.
Ground application only.

FOR SALE FOR USE FOR THE CONTROL OF COLORADO POTATO BEETLE AND APHIDS ON FIELD PEPPERS:
Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Peppers	Colorado potato beetle	80 - 165	Apply sufficient spray volume for thorough coverage. Thorough and uniform spray coverage is important to obtain optimum control. Begin applications when treatment thresholds have been reached as determined by local monitoring.
	Aphids	115 - 175	

Use the high rate under heavy pest pressure.
Do not make more than 4 applications per season for control of aphids.
Do not make more than 2 applications per season for control of Colorado potato beetle.
Do not apply more than once every 7 days.
There are no rotational crop plant back restrictions for this product.
Ground application only.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha
STONE FRUIT (apricot, sweet or tart cherry,	Oriental fruit moth (Ontario only)	245-490

nectarine, peach, plum, fresh prune, plumcot)	Cherry fruit fly - suppression (cherry only) Plum curculio*	490

*Under high plum curculio pest pressure the level of damage reduction may be limited to suppression.

Specific Directions: Adequate spray coverage is essential for optimum control. Apply in a minimum finished spray volume of 1000 L/ha. Use the high rate under heavy pest pressure. Do not apply during bloom. The first application and follow-up applications, if required, should be applied when treatment thresholds have been reached as indicated by monitoring with pheromone traps in conjunction with degree days. Consult your local extension specialist for advice. The emergence of 3rd or 4th generations of OFM is less synchronized than the 1st and 2nd generations. Alternate with other insecticides for 3rd or 4th generations to delay the development of insecticide resistance in pest populations.

RESTRICTIONS AND PRECAUTIONS:
Do not make more than 4 applications per season.
Do not apply more than once every 12 days.
Do not exceed a total of 672 g active ingredient (1.97 L of product) per ha per season.

FOR SALE FOR USE FOR THE CONTROL OF APHIDS, TARNISHED PLANT BUGS AND LEAF HOPPERS ON STRAWBERRIES ONLY

Apply in a minimum finished spray volume of 187 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha
Strawberry	Aphids and Leaf hoppers	115 - 175
	Tarnished Plant Bugs	170 - 430

Specific Directions: Begin application when insect populations reach recognized economic threshold levels Consult the provincial extension service or professional consultants or other qualified authorities to determine the appropriate threshold levels for treatment in your area. Adequate spray coverage is essential for optimum control.

RESTRICTIONS AND PRECAUTIONS:
Use the high rate under heavy pest pressure.
Do not make more than 2 applications per season.
Do not apply more than once every 8 days.
Do not apply during bloom.

FOR SALE FOR USE FOR THE CONTROL OF BLUEBERRY MAGGOT ON LOWBUSH AND HIGHBUSH BLUEBERRIES.

Apply in a minimum finished spray volume of 187 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha
Lowbush and Highbush blueberries	Blueberry Maggot	280 - 330

Timing of Application: Begin application when insect populations reach recognized economic threshold levels. Monitor fruiting field by placing sticky traps in the field at the beginning of July. Apply within 7 days of the first blueberry fruit fly capture.

RESTRICTIONS AND PRECAUTIONS:
Use the high rate where vegetation is dense or when fruit fly populations are high.
Do not make more than 4 applications per season.
Do not apply more than once every 12 days.
Do not apply during bloom.

FOR SALE FOR USE FOR THE CONTROL OF APHIDS AND JAPANESE BEETLE ON BUSHBERRIES (crop subgroup 13-07B).

Apply in a minimum finished spray volume of 187 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha
Bushberries (crop subgroup 13-07B)	Aphids	115 - 175
	Japanese Beetle	165

Timing of Application: Apply when threshold level is reached. Consult provincial guidelines and local extension experts. Repeat applications may be made at least 12 days later if required.

RESTRICTIONS AND PRECAUTIONS:
Adequate spray coverage is essential for optimum control. Use the high rate under heavy pest pressure.
Do not make more than 4 applications per season.
Do not apply during bloom.

FOR SALE FOR USE FOR THE CONTROL OF BLUEBERRY FLEA BEETLE, BLUEBERRY THRIPS, CHERRY FRUITWORM, CRANBERRY FRUITWORM, STRAWBERRY ROOTWORM AND SUPPRESSION OF BLUEBERRY SPANWORM ON LOWBUSH AND HIGHBUSH BLUEBERRIES.

Apply in a minimum finished spray volume of 187 L/ha by ground.

SITE	PESTS	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Low bush and high bush blueberries	blueberry flea beetle	330	Scout both sprout and fruiting fields and apply when threshold levels have been reached. Consult provincial guidelines and local extension experts.
	blueberry spanworm (suppression)		Scout both sprout and fruiting fields during spring and early summer and apply when threshold levels have been reached. Consult provincial guidelines and local extension experts. Spanworms are primarily night feeders and may not be observed during the day.
	blueberry thrips		Apply when new shoots are 0.5 – 1.5 cm tall. Repeat applications may be made at least 12 days later if required. Consult provincial guidelines and local extension experts.
	cherry fruitworm, cranberry fruitworm		Begin application when egg hatch begins. Consult provincial guidelines and local extension experts.
	strawberry rootworm (adults)		Apply when the threshold level of strawberry rootworm adults has been reached. Consult provincial guidelines and local extension experts.

Specific Directions: Begin application when insect populations reach recognized economic threshold levels. Consult the provincial extension service, or professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area. Adequate spray coverage is essential for optimum control.

RESTRICTIONS AND PRECAUTIONS: Lowbush and Highbush Blueberries
Do not make more than 4 applications per season.
Do not apply more than once every 12 days.
Do not exceed a total of 448 g active ingredient (1.31 L of product) per ha per season.
Do not apply during bloom.

Wear chemical resistant coveralls, long sleeved shirt, long pants and chemical resistant gloves during mixing, loading, applying and clean-up or repair activities. In addition, a respirator must be worn for mixing and loading activities.

GRAPES.

Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PESTS	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Grapes	Leafhoppers Grape berry moth Japanese beetle Grape phyloxera (aerial form only)	165	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control. Do not make a foliar application of Assail 30 SC Insecticide following a soil application of a Group 4 Insecticide.

RESTRICTIONS AND PRECAUTIONS: Grapes
Do not make more than 2 applications per season.
Do not apply more than once every 14 days.
Do not exceed a total of 112 g active ingredient (330 mL of product) per ha per season.
Ground application, foliar spray only.

DIRECTIONS FOR USE:

FOR SALE FOR USE FOR THE CONTROL OF APHIDS IN SWEET CORN

Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Sweet Corn	Aphids	115 – 175	Begin applications when treatment thresholds have been reached as determined by local monitoring. Consult professional consultants or other qualified authorities to determine appropriate threshold levels of treatment in your area. Adequate spray coverage is essential to obtain optimum control.

RESTRICTIONS AND PRECAUTIONS:

- Use higher dosage rates for heavy infestations or dense foliage.
- Do not make more than 2 applications per season.
- Do not apply more than once every 21 days.
- Do not exceed a total of 120 g active ingredient (350 mL of product) per hectare per season.
- Applications timed for other pests may reduce the number of applications for this pest.
- There are no rotational crop plant restrictions for this product.
- Only mechanical detasseling is allowed. Do not detassel treated corn by hand.

FOR SALE FOR USE FOR THE CONTROL OF APPLE MAGGOT, EUROPEAN APPLE SAWFLY, GREEN FRUITWORM, MULLEIN LEAF BUG, AND PLUM CURCULIO ON CROP GROUP 11: Pome Fruit – Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental) and Quince

Apply in a minimum finished spray volume of 1000 L/ha by ground.

SITE	PESTS	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Pome Fruit Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental) and Quince	Green fruitworm	245	Begin applications when insect populations reach recognized economic thresholds levels. Consult provincial guidelines, local extension experts, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area. Adequate spray coverage is essential for optimum control.
	Mullein leaf bug	165 – 330	
	Apple maggot European apple sawfly Plum curculio	245 - 490	

RESTRICTIONS AND PRECAUTIONS: Pome Fruit

- Use the high rate under heavy pest pressure.
- Do not make more than 4 applications per season.
- Do not apply more than once every 12 days.
- Do not exceed a total of 672 g active ingredient (1.97 L of product) per ha per season.
- Do not apply during bloom.

FOR SALE FOR USE FOR THE SUPPRESSION OF TARNISHED PLANT BUG AND CONTROL OF ALFALFA PLANT BUG IN SEED ALFALFA:

Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PESTS	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Seed alfalfa	Tarnished Plant Bug Alfalfa Plant Bug	180 - 350	Apply prior to bloom up to the time when 50% of seed pods are ripe. Begin when adults and/or 4-5th instar nymphs have reached economic threshold levels for your area. Use the higher rate for heavier infestations. Application may be repeated if necessary to a maximum of 3 applications per season. Consult the provincial extension service, or professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area. Thorough coverage is essential for optimum control.

RESTRICTIONS AND PRECAUTIONS: Seed Alfalfa

- Do not make more than 3 applications per season.
- Do not apply more than once every 7 days.
- Do not exceed a total of 357 g active ingredient (1.05 L of product) per ha per season.
- Do not cut treated fields for hay/forage.
- Do not graze treated fields

FOR SALE FOR USE FOR THE CONTROL OF SWEDE MIDGE ON RUTABAGA

Apply in a minimum finished spray volume of 200 L/ha by ground.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha

Rutabagas	Swede midge	175
Specific Directions: Begin application when insect populations reach recognized economic threshold levels. Consult the provincial extension service or professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area. Adequate spray coverage is essential for optimal control. **RESTRICTIONS AND PRECAUTIONS: Rutabaga** Do not make more than 5 applications per season. Do not apply more than once every 7 days. Do not exceed a total of 301 g active ingredient (880 mL of product) per ha per season. Applications timed for other pests may reduce the number of applications for this pest. There are no rotational crop plant restrictions for this product.		

FOR SALE FOR USE FOR THE CONTROL OF APHIDS IN:

1) **CROP SUBGROUP 6B: SUCCULENT SHELLED PEA AND BEAN SUBGROUP**: Bean (*Phaseolus* spp.) (includes lima bean); Bean (*Vigna* spp.) (includes blackeyed pea, cowpea, southern pea); Broad bean (fava bean) (*Vicia faba*); Pea (*Pisum* spp.) (includes English pea, garden pea, green pea); Pigeon pea (*Cajanus cajan*).
2) **EDIBLE PODDED PEA:**
   Pea (*Pisum* spp.) (includes dwarf pea, edible-pod pea, snow pea, sugar snap pea)

Apply in a minimum finished spray volume of 200 L/ha. Ground application (foliar) only.

SITE	PEST	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Crop subgroup 6B: Succulent shelled pea and bean	Aphids	115-175	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control. Use higher rates under heavy pest pressure.

RESTRICTIONS AND PRECAUTIONS:

- Do not make more than 3 applications per season.
- Do not apply more than once every 7 days.
- Do not use Assail 30 SC on crops following a soil, in-furrow or seed treatment application of a Group 4 insecticide.

For sale for use for the control of Asparagus aphids and Asparagus beetle in Asparagus:

SPRAY VOLUME FOR ASPARAGUS: Foliar Spray. Apply in a minimum finished spray volume of 190 litres per hectare, by ground only. Thorough coverage is important to obtain optimum control.

SITE	PESTS	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Asparagus	Asparagus aphids	115 - 175	Begin applications when treatment thresholds have been reached. For asparagus aphids, apply to new plantings and when plants are young. For asparagus beetles, begin sampling early in the season and throughout the season. Use higher rates when the plants are larger and under heavy pest pressure.
	Asparagus beetle	165 - 330	

RESTRICTIONS AND PRECAUTIONS: Asparagus

- Do not make more than two (2) applications per growing season.
- Do not apply more than once every 10 days.
- Do not exceed a total of 655 mL product per hectare per growing season.

Caneberries (Crop Subgroup 13-07A): Blackberries and Raspberries

Spray volume for Caneberries: Ground application – apply in a minimum finished spray volume of 187 liters/hectare.

SITE	PESTS	RATE mL ASSAIL 30 SC Insecticide/ha	SPECIFIC DIRECTIONS
Caneberries (Crop Subgroup 13-07A): Blackberries and Raspberries	Aphids Leafhoppers	115 – 175	Begin applications when treatment thresholds have been reached. Use the higher rate under heavy pest pressure.
	Japanese Beetle	165	
Do not make more than 4 applications per season. Do not apply more than once every 7 days.			