



GROUP 4 INSECTICIDE

CALYPSO™ 480 SC INSECTICIDE

SUSPENSION CONCENTRATE

For Control of Insects in Pome Fruit

COMMERCIAL

DANGER



POISON

TRIPLE



RINSE

POTENTIAL SKIN SENSITIZER

REGISTRATION NUMBER 28429 PEST CONTROL PRODUCTS ACT

GUARANTEE: Thiacloprid.....480 g/L

Contains 1, 2-benzisothiazolin-3-one at 0.039%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.001% and 2-methyl-4-isothiazolin-3-one at 0.0004% as preservatives

READ THE LABEL BEFORE USING

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 1 - 10 LITRES

Bayer CropScience Inc.
200-160 Quarry Park Blvd. SE
Calgary, AB
T2C 3G3

24 HOUR EMERGENCY PHONE: 1-800-334-7577

GROWER INFORMATION: 1-888-283-6847

CALYPSO 480 SC Insecticide

Table of Contents:

Section Number:

GENERAL INFORMATION

The Product 1

SAFETY AND HANDLING

Precautions, Protective Clothing & Equipment, and Re-entry Restriction 2

First Aid and Toxicological Information 3

Environmental Hazards 4

Storage 5

Disposal 6

DIRECTIONS FOR USE

Crop, Pest, Rate, Timing 7

Resistance Management Recommendations 8

Application Precautions 9

Mixing Instructions 10

Pre-harvest Interval 11

Notices 12

For more information, contact:

Bayer CropScience Inc.
200-160 Quarry Park Blvd. SE
Calgary, AB
T2C 3G3

24 HOUR EMERGENCY PHONE: 1-800-334-7577

GROWER INFORMATION: 1-888-283-6847

GENERAL INFORMATION

Section 1: The Product

Calypso 480 SC Insecticide is a locally systemic and translaminar insecticide which provides control of insect pests in pome fruit. Calypso 480 SC Insecticide controls insect pests by contact action and by ingestion of the treated plant tissue.

SAFETY AND HANDLING

Section 2: Precautions, Protective Clothing and Equipment, and Re-entry Restriction.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Fatal or poisonous if swallowed. Avoid contact with eyes and skin. Harmful if inhaled or absorbed through the skin. Potential skin sensitizer. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, or smoking. If product comes in contact with clothing, remove all contaminated clothing, wash skin with soap and water and dress in clean clothing. Launder applicator clothing separate from other laundry. **DO NOT** re-enter treated fields for 12 hours after application. If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at www.croplife.ca.

PROTECTIVE CLOTHING AND EQUIPMENT:

During mixing, loading, clean-up and repair activities, workers must wear long pants, long-sleeved shirt, chemical-resistant gloves and boots. During application, workers must wear long pants, long-sleeved shirt, and boots.

Section 3: First Aid and Toxicological Information

FIRST AID:

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. 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 container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION:

Treat symptomatically. Medical personnel should contact Bayer's Medical Information Services, toll free at 1-800-334-7577.

Section 4: Environmental Hazards

TOXIC to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland.

TOXIC to aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted or fine textured such as clay).

Avoid application of this product when heavy rain is forecast.

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

Section 5: Storage

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

This product CANNOT be stored below freezing.

If stored for 1 year or longer, shake well before using.

Store the tightly closed container away from feeds, seeds, fertiliser, plants and foodstuffs.

Do not use or store in or around the home.

Keep in original container during storage.

In case of fire, leaking or damaged containers, call toll free 1-800-334-7577.

Section 6: Disposal

Recyclable Container Disposal:

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.

Disposal of Unused, Unwanted Product:

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 cleanup of spills.

Disposal of Unused Spray Solution:

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area, away from water supplies, ditches, and irrigation canals.

DIRECTIONS FOR USE

Section 7: Crop, Insect, Rate, Timing

Apply the specified amount of Calypso 480 SC Insecticide per hectare in a minimum spray volume of 1000 L of water. Higher spray volumes can be used provided the specified amount of Calypso 480 SC Insecticide per hectare is used.

Crop Group 11 Pome Fruit: Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear, Quince.

INSECT	RATE (mL Calypso 480 SC Insecticide/ha)	TIMING
First generation codling moth, Plum curculio, Pear psylla, European apple sawfly	290 – 440 mL/ha	<ul style="list-style-type: none"> • DO NOT apply more than 875 mL Calypso 480SC Insecticide/ha in one season • DO NOT make more than 3 applications/year. • For plum curculio, apply the high rate when pest pressure is high. Make the first application around petal fall and follow with a second spray to target the oviposition period if required. A second application may be required when emergence is extended. • For pear psylla, apply the higher rate when pest pressure is high. Target prebloom and postbloom to first cover when populations have reached economic thresholds and the majority of the population is in early instar stages. Reapply at 7-10 day intervals if monitoring indicates populations have reached economic threshold. • For European apple sawfly, apply the higher rate when pest pressure is high. Target petal fall when populations have reached economic thresholds. If there is a history of heavy sawfly pressure in the orchard, target the Calypso applications at pink and petal fall. Reapply at 7-10 day intervals if monitoring indicates populations have reached economic thresholds. • For codling moth, begin applications at peak egg deposition and prior to egg hatch. A second application may be required after 14-21 days if pheromone traps indicate that
Apple maggot, Second generation codling moth, Oriental fruit moth	440 mL/ha	
First generation spotted tentiform leafminer, Leafhoppers	145 mL/ha	

<p>Aphids, Japanese beetle, Mullein bug, Second and third generation spotted tentiform leafminer</p>	<p>145 - 290 mL/ha</p>	<p>populations have reached economic thresholds. For first generation codling moth control, apply 290 mL product/ha when pest pressure is low to moderate and populations of oriental fruit moth are either absent or require a different timing, and 440 mL/ha under high pest pressure or when the timing for control measures of both codling moth and oriental fruit moth are synchronous.</p> <ul style="list-style-type: none"> • For apple maggot and oriental fruit moth, apply 440 mL product/ha for all generations. Utilize pheromone traps or sticky traps to determine optimum application timing. Repeat at 14-21 day intervals if required. • For mullein bug, apply when nymphs have reached economic thresholds. A second application at 7-14 days may be required during periods of extended emergence. • For leafhoppers, apply when economic thresholds are reached. • For spotted tentiform leafminer, apply 145 mL product/ha for control of first generation. For subsequent generations, apply 145 mL product/ha under low to moderate pest pressure, and 290 mL product/ha under high pest pressure. Target application at oviposition to early sap feeding stages. A second application may be required at 7-14 days under severe pressure or when extended flight occurs. • For Aphids, apply 145ml product/ ha for control and use 290ml product/ ha under heavy pest pressures. • For Japanese Beetle apply 145 ml product /ha for moderate pest pressure and use 290ml product/ha under heavy pest pressures.
--	------------------------	---

NOTE: Do not tank mix CALYPSO 480 SC Insecticide with pesticides, fertilizers or any other chemical additives unless recommended on this label.

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

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.

DO NOT apply by air.

BUFFER ZONES: The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, Prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Crop	Airblast application	Buffer Zones (metres) Required for the Protection of:					
		Freshwater Habitat of Depths:			Estuarine/Marine Habitats of Depths:		
		Less than 1 m	1 - 3 m	Greater than 3 m	Less than 1 m	1 - 3 m	Greater than 3 m
Pome fruits	Early growth stage	30	25	15	25	20	10
	Late growth stage	20	15	5	15	15	5

Section 8: Resistance Management Recommendations

For resistance management, please note that CALYPSO 480 SC Insecticide contains a Group 4 insecticide. Any insect population may contain individuals naturally resistant to Calypso 480 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 Calypso 480 SC Insecticide or other Group 4 Insecticides with different groups that control the same pests in a field.
- Insecticide use should be based on an integrated pest management (IPM) program that includes scouting, record keeping and considers cultural, biological, and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact the 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 a Bayer CropScience representative at 1-888-283-6847 or at bayercropscience.com.

Section 9: Application Precautions

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

DO NOT apply more than 875 mL/ha of CALYPSO 480 SC Insecticide in a year. When using CALYPSO 480 SC Insecticide, do not apply more than three times in a year to support sound resistance management strategies.

If spray mixture remains in the tank overnight, or for long periods during the day, agitate thoroughly prior to application.

Section 10: Mixing Instructions

CALYPSO 480 SC Insecticide must be applied with properly calibrated, clean equipment.

Prior to adding CALYPSO 480 SC Insecticide to the spray tank, ensure that the spray tank is thoroughly clean:

- Add one-half of the required amount of water to the spray or mixing tank and start agitation.
- Add the required quantity of CALYPSO 480 SC Insecticide to the water and complete filling with water to the required total volume.
- Maintain agitation throughout mixing and spraying.

Section 11: Pre-harvest Interval

Do not apply within 30 days of harvest.

Section 12: Notices

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. The user assumes the risk to persons or property that arises from any such use of this product.

For more information, contact:

Bayer CropScience Inc.
200-160 Quarry Park Blvd. SE
Calgary, AB
T2C 3G3

CALYPSO is a registered trademark of Bayer.