GROUP 15 INSECTICIDE

RIMON 10 EC

Insecticide

10% Emulsifiable Concentrate Insect Growth Regulator

For Control of Listed Insect Pests on Apple and Potato

AGRICULTURAL

READ THE LABEL BEFORE USING KEEP OUT OF THE REACH OF CHILDREN

GUARANTEE: Novaluron.....10%

REGISTRATION NO. 28881 PEST CONTROL PRODUCTS ACT

NET CONTENTS: XX L

Chemtura Canada Co. 25 Erb Street Elmira, Ontario N3B 3A3 24 Hour Emergency Phone: 1-866-744-3060 Product Information: 1-800-350-1745

DIRECTIONS FOR USE

GENERAL INFORMATION

Rimon 10 EC Insecticide is an insect growth regulator (IGR) that must be absorbed by eggs or ingested by insect larvae to be fully effective. Rimon 10 EC Insecticide is an insecticide for control of listed foliar insect pests on apple and potato. The primary mode of action is by disrupting cuticle formation and deposition occurring when insects change from one developmental stage to another resulting in death at molting. Due to this mode of action, Rimon 10 EC Insecticide has no effect on adult stages of insects that have completed all the successive molts through larval or nymphal stages of development.

Proper application techniques help ensure thorough spray coverage and correct dosage necessary to obtain optimum control. Higher water volumes and increased spray pressure generally provide better coverage. Apply at the listed rates when insect populations reach locally determined economic thresholds. Consult local extension agents, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Follow-up treatments of Rimon 10 EC Insecticide should be applied at 10-14 day intervals to keep pest populations within threshold limits, if monitoring indicates this is required.

NOTE: The compatibility of Rimon 10 EC Insecticide with concurrent releases of insects for biocontrol of plant pests has not been established.

<u>Airblast Application</u>: **DO NOT** apply during periods of dead calm. **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.

<u>Ground Spray Application</u>: **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 ASAE medium classification.

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.

Method of application	Сгор	Buffer Zones (metres) Required for the Protection of:						
		Freshwater Habitat of Depths:			Estuarine/Marine Habitats of Depths:			Townset
		Less than 1 m	1-3 m	Greater than 3 m	Less than 1 m	1-3 m	Greater than 3 m	Terrestri al habitat
Field sprayer*	Potato- ASAE Medium Spray Quality	20	15	5	35	30	10	1
	Potato- ASAE Coarse Spray Quality	10	10	3	20	15	5	0
Airblast (early growth stage)	Apple	75	70	60	80	80	70	30
Airblast (late growth stage)	Apple	65	60	50	70	70	60	20

*For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy or ground, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy or ground, the labelled buffer zone can be reduced by 30%.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

Mixing Instructions: Prepare solution concentrations in a clean, empty spray tank. Use clean spray filters. Add water to 1/2 level of tank. Add the appropriate amount of Rimon 10 EC Insecticide to the tank and agitate to ensure proper mixture. Continue filling tank with water until desired dilution is achieved. Shake or re-agitate sprayer before use if application is interrupted. Make up only the amount of application volume as required. Dispose of any unused spray at the end of each day according to the instructions found in the STORAGE AND DISPOSAL section of this label.

Spray Coverage: All parts of the crop must receive uniform spray coverage or desired result may not occur. Consult your local agricultural specialist for specific information on the best application timing and spray volumes for your region.

APPLE ORCHARD

Make applications of Rimon 10 EC Insecticide by conventional ground sprayers that are calibrated to deliver a minimum of 700 litres per hectare to trellised trees or trees 3 metres tall or less. For trees over 3 metres tall, use a minimum of 935 litres per hectare. Do not exceed 3500 litres per hectare.

When using an airblast sprayer, the equipment should be operated at ground speeds of 5 km/h or less, using adequate spray pressures and spray volumes to ensure that the air volume within the tree canopy is completely replaced by the output from the airblast sprayer which will result in proper coverage of the target crop. Do not use in alternate row middle application patterns since this application method may result in less than satisfactory coverage and poor performance.

Follow-up treatments of Rimon 10 EC Insecticide should be applied at 10-14 day intervals to keep pest populations within threshold limits, if monitoring indicates this is required.

Target Pests	Concentration	Application Instructions
Codling moth	0.93 to 1.4 L product/1000 L	Application timing is based on biofix, which is based on the pest life cycle. Biofix is defined as the date of first sustained adult catch in pheromone traps. For the determination of degree days (DD) for codling moth, a lower and upper threshold of 10 and 31°C is used.
	Do not exceed 3500 L water/ha applied as a dilute spray.	For each codling moth generation: The 1st application should be made at 100 DD (161 DD for Western Canada) following biofix. Make additional applications at 10-14 day intervals, as required by monitoring. For the second generation, the first application is generally made 500 - 600 DD following the 1st generation biofix.
		To calculate degree days (DD) accumulation for codling moth, use a lower and upper threshold of 10 and 31°C and a base temperature of 10°C. Alternatively, refer to development information provided by local packinghouses or weather monitoring networks. In the absence of degree day development model, apply Rimon 10 EC Insecticide about $7 - 10$ days after biofix, weather permitting.
		Rimon 10 EC Insecticide must be applied prior to egg deposition or shortly thereafter to prevent codling moth damage to fruit. Rimon 10 EC Insecticide must be applied before larvae penetrate into the fruit.
		Rimon 10 EC Insecticide will provide 10 to 14 days of fruit protection depending on the concentration and rate of fruit expansion. Increase the rate and decrease the application interval for heavy infestation or continuous moth flight and egg oviposition.
		DO NOT apply more than 4 applications per crop per season.
		DO NOT apply more than 10.97 L product/ha/crop/season. DO NOT apply within 14 days of harvest.

INSECTS CONTROLLED BY RIMON 10 EC IN APPLE

Target Pests	Concentration	Application Instructions
Oriental fruit moth	0.93 to 1.4 L product/1000 L Do not exceed 3500 L water/ha applied as a dilute spray.	 Begin applications before egg hatch of each generation to prevent larval penetration of the twigs and fruit. Rimon 10 EC Insecticide will provide 10 to 14 days of protection depending on the concentration and rate of plant growth once applied. For situations of heavy infestations and continuous moth flight and egg oviposition, and where it is difficult to obtain thorough coverage, use the highest concentration and maintain coverage with reapplications at 10-14 day intervals, as required by monitoring. Rimon 10 EC Insecticide must be applied before larvae penetrate into the fruit or twigs. DO NOT apply more than 4 applications per crop per season. DO NOT apply more than 10.97 L product/ha/crop/season. DO NOT apply within 14 days of harvest.

PRODUCT MIXING CHART

Amount of Product Required per

Spray Volume	Hect	Comments		
Spray volume	0.93 L of	1.4 L of	comments	
	Product/1000 L	Product/1000 L		
700 L/ha	651 mL	980 mL	Minimum spray volume for trees less than 3 metres tall or trellised trees. <u>DO NOT</u> use a lower spray volume on trees greater than 3 metres tall.	
935 L/ha	935 L/ha 870 mL		935 L/ha is the	
1000 L/ha	930 mL	1.4 L	Minimum spray	
1500 L/ha 1.4 L		2.1 L	volume for trees	
3000 L/ha 2.8 L		4.2 L	greater than 3	
3500 L/ha 3.3 L		4.9 L	metres tall	

ΡΟΤΑΤΟ

Apply recommended dosage by conventional ground sprayer equipment capable of delivering sufficient water to obtain thorough, uniform coverage of the target crop. Spray equipment boom and nozzles should be oriented in a manner to minimize boom height to optimize coverage uniformity, maximize deposition and reduce spray drift.

Drop nozzles may be required to obtain uniform coverage against certain pests that develop down in the canopy. A minimum spray volume of 100 litres per hectare should be used with ground spray equipment in potatoes. Higher water volume will provide better coverage and performance. Use hollow cone, disc-core hollow cone or twin jet fan nozzles suitable for insecticide spraying.

Target Pests	Application rate	Application Instructions
Colorado Potato Beetle, European Corn Borer	410-820 mL product/ha (44- 88 g a.i./ha)	DO NOT apply more than 2 applications per crop per season. DO NOT apply more than 1640 mL product/ha/crop/season (177 g a.i./ha/crop/season). DO NOT apply within 14 days of harvest.
		Colorado Potato Beetle: Application should be made when the majority of the population is at egg hatch to the second instar. Use higher application rates and spray volumes for higher pest pressure, when larvae are large or foliage canopy is tall or dense. Reapplication on a 10 to 14 day interval will be required to protect new growth or monitoring indicates that it is necessary.
		European Corn Borer: The first application should be made just prior to egg hatch. Scout for European corn borer to monitor egg-laying and egg hatch to determine application timing. Use higher application rates and spray volumes for higher pest pressure. Reapplication on a 10-14 day interval will be required to protect new growth or monitoring indicates that it is necessary.

INSECTS CONTROLLED BY RIMON 10 EC INSECTICI DE IN POTATO

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Rimon 10 EC Insecticide contains a Group 15 Insecticide. Any insect population may contain individuals naturally resistant to Rimon 10 EC Insecticide and other Group 15 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 Rimon 10 EC Insecticide or other Group 15 Insecticides with different groups that control the same pests in a field.
- Use tank mixtures with insecticides from a different group when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting, 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 Makhteshim Agan of North America, Inc. at 1-866-626-2462 or at <u>www.manainc.com</u>.

PRECAUTIONS KEEP OUT OF REACH OF CHILDREN

WARNING: Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixer/loaders must wear long-sleeved shirt, long pants, footwear, eye protection, and chemicalresistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, or Viton. Applicators must wear long-sleeved shirt, long pants, and footwear.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, or Viton
- Shoes plus socks
- Protective eyewear

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 PPE. If there are no such washing instructions, use detergent and hot water. Keep and wash PPE separately from other laundry.

Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. 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.

DO NOT re-enter treated area for 12 hours.

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

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

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 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 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 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

There is no specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

ENVIRONMENTAL HAZARDS

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

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 habitat by cleaning of equipment or disposal of wastes.

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.

This product may be TOXIC to bee colonies exposed to direct treatment, drift, or residues on flowering crops or weeds. Avoid applying this product to flowering crops or weeds if bees are visiting the treatment area.

TOXIC to certain beneficial insects (e.g. predatory mites, parasitoid wasps). Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland.

STORAGE

To prevent contamination, store this product away from food or feed.

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.

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

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