GROUP 1B INSECTICIDE

DIAZOL 50W (Diazinon) COMMERCIAL

Wettable Powder Insecticide

Contains diazinon for insect control on certain vegetables, fruits, nuts, field crops and ornamentals.



REGISTRATION NO. 15897 PEST CONTROL PRODUCTS ACT

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

Net Contents: 2.27 kg.

Makhteshim Agan of North America Inc. 4515 Falls of Neuse Road, Suite 300 Raleigh, NC 27609 919 256-9305

DIAZOL 50W

DIRECTIONS FOR USE

If not indicated in recommendations, Diazol 50W should be mixed with sufficient water to assure thorough coverage. Best control is obtained when application is made at the first sign of insects. Repeat application as necessary to maintain control unless otherwise stated.

Diazol 50W is a wettable powder which requires constant agitation during application.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Diazol 50W contains a Group 1B insecticide. Any insect population may contain individuals naturally resistant to Diazol 50W and other Group 1B insecticides. The resistant individuals may dominate the insect population if this group of insecticides are 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 Diazol 50W or other Group 1B 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 and to report suspected resistance, contact MANA at 1 212 661-9800 (collect) or andy@manainc.com.

USE RESTRICTIONS

- 1. Wear an approved respirator when handling large amounts.
- 2. Label all treated seed 'Poisonous to man and animals. This seed has been treated with diazinon. Do not use for food or feed purposes.'
- 3. Do not spray animals or humans.
- 4. Remove all animals, fish and birds before spraying; do not return them for at least 4 hours after treatment.
- 5. Do not store near food or feed.
- 6. Toxic to fish and wildlife.
- 7. Highly toxic to bees exposed to direct treatment or to residues on crops. Birds feeding in treated areas may be killed.
- 8. Do not contaminate any body of water.

FRUIT

APPLES - Apple Aphid (eggs), Brown Mite (eggs), European Red Mite (eggs), San Jose Scale: Use 500 g with 20 litres dormant emulsive oil per 1000 litres of water. Apply for full coverage as a dormant spray. Fruit tree Leafroller, Green Fruitworm: Use 1 kg in 1000 litres of water. Apply at pink stage. Do not apply within 14 days of harvest. Russeting of certain varieties of apples may occur.

Campylomma: Use 2.25-3.25 kg per hectare. Apply at calyx or petal fall. The lower rate is recommended for use in British Columbia. Pale Apple Leafroller: Use 2 kg in 1000 litres of water. QUEBEC: Apply once at the pink stage.

PEARS - San Jose Scale: Use 1.0 kg with 20 litres dormant emulsive oil in 1000 litres of water. Apply as a

dormant spray for full coverage. Fruittree Leafroller: Use 1 kg in 1000 litres of water. Apply at the pink stage. **APPLES, PEARS - Codling Moth:** Use 1 kg in 1000 litres of water. Apply in cover sprays as needed. Second brood may require additional treatment. Do not apply within 14 days of harvest. Russeting of certain varieties of apples may occur. Apple Maggot: Use 1 kg in 1000 litres of water. Use at least 3 cover sprays, 10 days apart, when flies are active and laying. Do not apply within 14 days of harvest. Russeting of certain varieties of apples may occur. Pear Psylla: Use 1 kg in 1000 litres of water. Apply in pre-pink, first, second, and third cover sprays. Do not apply within 14 days of harvest. Russeting of certain varieties of apples and pears may occur. Eyespotted Bud Moth: Use 1 kg in 1000 litres of water. Apply at pink stage and at full hatch in late July or early August. Do not apply within 14 days of harvest. Russeting of certain varieties of apples may occur. Apple Aphid, Rosy Apple Aphid, Woolly Apple Aphid: Use 500 g-1 kg in 1000 litres of water. Apply as thorough cover spray. Repeat as necessary. Do not apply within 14 days of harvest. Russeting of certain varieties of apples may occur. Mealybugs, Scale Insects (Crawlers), Stinkbugs: Use 1 kg in 1000 litres of water. Apply as infestation occurs. Repeat as necessary. Do not apply within 14 days of harvest. Russeting of certain varieties of apples and pears may occur. Tentiform Leafminers: Use 1 kg in 1000 litres of water. Apply for full coverage in calyx and first cover spray. Include in later cover sprays if second and third generations develop. Do not apply within 14 days of harvest. Russeting of certain varieties of apples may occur.

APRICOTS, PEACHES - Aphids, San Jose Scale (crawlers): Use 1 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary. Do not apply within 10 days of harvest. Peach Twig Borer, San Jose Scale: Use 1 kg in 20 litres dormant emulsive oil in 1000 litres of water. Apply for full coverage as a dormant spray. Peach Twig Borer: Use 1 kg with 10 litres light to medium summer oil in 1000 litres of water. Spray thoroughly at petal fall. Do not apply within 10 days of harvest. Use 1 kg in 1000 litres of water. Apply as full cover spray in May and June. Do not apply within 10 days of harvest.

PLUMS, PRUNES - Mealy Plum Aphid, Rusty Plum Aphid, Thistle Aphid: Use 1 kg in 1000 litres of water. Apply as full cover spray. Repeat as necessary. Do not apply within 10 days of harvest. Eyespotted Bud Moth: Use 1 kg per 1000 litres of water. Apply at pink stage. Do not apply within 10 days of harvest. Apple Maggot: Use 1 kg in 1000 litres of water. Apply 2 to 3 sprays at 10-day intervals during late July and early August. Do not apply within 10 days of harvest. Mealy Plum Aphid (eggs), Peach Twig Borer, San Jose Scale: Use 1 kg with 25 litres dormant emulsive oil in 1000 litres of water. Apply for full coverage as a dormant spray. Use 1 kg with 10 litres light to medium summer oil in 1000 litres of water. Apply in late April or early May. Do not apply within 10 days of harvest.

CHERRIES - Cherry Fruit Fly: Use 1 kg in 1000 litres of water. Apply when flies emerge. Repeat 2 to 3 times at 10-day intervals. Do not apply within 10 days of harvest. Black Cherry Aphid: Use 1 kg in 1000 litres of water. Apply when insects first appear. Repeat after 10 days. Do not apply within 10 days of harvest. San Jose Scale (crawlers): Use 1 kg in 1000 litres of water. Apply when crawlers first appear. Do not apply within 10 days of harvest. San Jose Scale: Use 1.25 kg with 30 litres dormant emulsive oil in 1000 litres of water. Apply for full coverage as a dormant spray. Fruit tree Leafroller: Use 1.0 kg in 1000 litres of water. Apply for full coverage at petal fall. Do not apply within 10 days of harvest. Eyespotted Bud Moth: Use 1.0 kg in 1000 litres of water. Apply for full coverage at green tip. Do not apply within 10 days of harvest.

GRAPES - Grape Berry Moth, Grape Leaffolder, Leafhoppers, Mealybugs: Use 1.0 kg in 1000 litres of water or 1.5-2.25 kg per hectare. Apply when infestation occurs. Repeat as necessary. Do not apply within 16 days of harvest.

STRAWBERRIES - Aphids: Use 1.0-2.0 kg in 1000 litres of water. Apply when pests first appear. Repeat as necessary. Do not apply within 5 days of harvest. Omnivorous Leaftier: Use 1.25 kg in 1000 litres of water. Direct spray to plant crown; agitate plant to ensure coverage. Apply again after harvest if necessary. Do not apply within 5 days of harvest. Strawberry Leafroller, Meadow Spittlebug: Use 2.25 kg in 2000 litres of water per hectare. Apply when blossoms show color. Do not apply within 5 days of harvest.

CRANBERRIES - Blackheaded Fireworms: Use 4.5 kg in 3200-3500 litres of water per hectare. Apply when insects first appear. Repeat as necessary. Do not apply within 7 days of harvest. Cranberry Fruitworm: Use 7 kg in 3200-3500 litres of water per hectare. Apply when insects first appear. Repeat as necessary. Do not apply within 7 days of harvest.

BLACKBERRIES, LOGANBERRIES, RASPBERRIES - Raspberry Crown Borer: Use 4.5 kg in 4000 litres of water per hectare. Drench crown area using 1/2 litre of mix per plant as new canes reach 10 cm height. Do not apply after bloom. Do not spray during bloom to avoid injury to pollinating insects. Aphids, Fruitworms, Leafhoppers, Raspberry Sawfly, Thrips: Use 1 kg in 1000 litres of water. Apply when blossom bud separates. Do not apply after bloom. Do not spray during bloom to avoid injury to pollinating insects.

CURRANTS, GOOSEBERRIES - Aphids, European Fruit Lecanium Scale (crawlers), Sawflies: Use 1 kg in 1000 litres of water. Apply immediately before the first blooms open. Do not apply after bloom. Do not spray during bloom to avoid injury to pollinating insects.

VEGETABLES

CUCUMBERS - Aphids, Cucumber Beetles, Thrips: Use 2.25 kg per hectare. Apply in sufficient water to ensure coverage. Repeat as necessary. Do not apply within 7 days of harvest.

MELONS, SQUASHES - Aphids, Cucumber Beetles, Leafhoppers, Thrips: Use 1.1-2.0 kg per hectare. Apply in sufficient water to ensure coverage. Repeat as necessary. Do not apply within 10 days of harvest.

BEETS, SPINACH - Aphids, Dipterous Leafminers: Use 1.1 kg per hectare. Apply in sufficient water to ensure coverage. Repeat as necessary. Do not apply within 14 days of harvest.

ONIONS - Onion Maggot: Use 125 grams per kg seed. Wet seed with water containing 2% methyl cellulose and mix until seed is well coated with powder. Do not store treated seed more than 3 weeks before planting. Allow seed to dry before bagging or seeding. Use 95-175 grams per 100 meters row. Apply to the seed furrow at planting or sowing time. For liquid formulations, use sufficient water to drench the furrow. Use lower rate on poor soils, higher on organic soils. Onion Maggot (adults): Use 1.1 kg per hectare. Apply when flies become numerous. Use sufficient water to ensure coverage. Repeat at intervals of 7 to 10 days as infestation warrants. Do not apply within 10 days of harvest. Onion Thrips: Use 1.1 kg per hectare. Apply in sufficient water to ensure coverage. Repeat as necessary. Do not apply within 10 days of harvest.

PARSNIPS - Dipterous Leafminers, Flea Beetles: Use 1.1 kg per hectare. Apply in sufficient water to ensure coverage. Repeat as necessary. Do not apply within 14 days of harvest.

CARROTS, PARSNIPS - Aphids: Use 1.1 kg per hectare. Apply in sufficient water to ensure coverage. Repeat as necessary. Do not apply within 10 days of harvest. Carrot Rust Fly: Use 1.1 kg per hectare. Apply in sufficient water to ensure coverage. Repeat at intervals of 7 to 10 days as infestation warrants. Do not apply within 10 days of harvest.

BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER - Root Maggots:

SEED BED TREATMENT: Use 625 grams in 1000 litres of water. Drench-spray each plant and the surrounding soil when the plants emerge. Repeat after 3 weeks. **PLANTING WATER TREATMENT:** Use 550 g in 1000 litres of water. Apply 170 mL to the plant or apply as a drench to soil around stem within a week of planting. An additional drench may be required after one month. **PLANT TREATMENT:** Wet stems and roots of plants with water containing a sticker such as Triton B-1956 (62.5 grams per 100 litres of water). Dust stems and roots thoroughly with a mixture of 1 part Diazol 50W and 3 parts powdered talc (12.5% dust). Plant immediately.

RADISHES - Root Maggots: SEED TREATMENT: Use 125 grams per kg seed. Wet seed with a 2% solution of methyl cellulose. Mix with insecticide until seed is well coated. Some delay in seedling emergence and some reduction in stand may occur. Allow to dry before bagging or seeding. **Aphids, Dipterous Leafminers, Flea Beetles:** Use 1.1 kg per hectare. Apply in sufficient water to ensure coverage. Repeat as necessary. Do not apply within 10 days of harvest.

RUTABAGA, TURNIPS - Root Maggots: SEEDING TREATMENT: Use 2.25 kg in 1000 litres of water per hectare. Apply as a drench in a narrow band directly over row when seedlings are up. Make a second application as a drench after thinning or make weekly applications as a drench 5 to 6 weeks later using 1.1 kg per hectare to kill adult flies. Drench thoroughly plant and surrounding soil. Direct spray to base of plant. Consult local agricultural authorities concerning the need for and the timing of additional applications. Do not apply within 14 days of harvest. **Aphids, Dipterous Leafminers, Flea Beetles:** Use 1.1 kg per hectare. Apply in sufficient water to ensure thorough coverage. Repeat as necessary. Do not apply within 14 days of harvest.

SALSIFY - Aphids, Dipterous Leafminers, Flea Beetles: Use 1.1 kg per hectare. Apply in sufficient water to ensure thorough coverage. Repeat as necessary. Do not apply within 10 days of harvest.

POTATOES - Aphids, Colorado Potato Beetle, Dipterous Leafminers, Flea Beetle, Leafhoppers: Use 1.1 kg per hectare. Apply in sufficient water to ensure thorough coverage. Repeat as necessary. Do not apply within 14 days of harvest. **Root Maggots, Seed Maggots:** Use 150 grams in 100 litres of water. Soak in Diazol solution or coat each seed piece evenly with a light film or dust. Treat the seed pieces within 6 hours after cutting. If planting is delayed beyond 2 days after treatment, treated seed should be stored in open crates to allow air drying before bagging or piling.

TOMATOES - Aphids, Dipterous Leafminers, Drosophila: Use 1.1-2.0 kg per hectare. Apply in sufficient water to ensure thorough coverage. Leafminers and Drosophila flies require weekly treatments.

PEPPERS - Aphids: Use 550 g-1.1 kg per hectare. Apply in sufficient water to ensure thorough coverage. Repeat as necessary. Do not apply within 5 days of harvest.

BEANS (FIELD, LIMA, SNAP) - Aphids, Bean Aphid, Dipterous Leafminers, Leafhoppers, Mexican Bean Beetle: Use 1.1 kg per hectare. Apply in sufficient water to ensure coverage. Repeat as necessary. Do not apply within 7 days of harvest. Root Maggots: Use 62.5 g per 100 kg seed. Apply dry or as a slurry. Do not store seeds more than 3 months before planting. Apply only in conjunction with or over a fungicidal treatment. Allow seed to dry before bagging or seeding.

CORN - Root Maggots: Use 62.5 grams per 100 kg seed. Apply dry or as a slurry. Remove or cover all food and utensils before treatment. Do not store treated seed more than 3 weeks before planting. Allow seed to dry before bagging or seeding.

VEGETABLES - Cutworms (surface and subterranean): Use 7.75 kg per hectare. Apply immediately before planting. Use sufficient water to ensure uniform coverage. Mix into 7.6 to 10 cm of soil, 7.6 to 15 cm for subterranean cutworms.

MUSHROOM HOUSES - Phorid Flies, Sciarid Flies: SURFACE TREATMENT: Use 10-20 kg in 1000 litres of water. Spray or apply with brush to inside and outside walls and ventilators after pasteurizing. Do not spray casing soil or compost bed. Do not let the spray mist contact mushrooms. SURFACE TREATMENT TO SELECTED AREAS: Use 1 kg in 1000 litres of water. Apply with a brush to wooden sides of beds, posts, doors, and door frames after pasteurizing. Repeat as necessary. Do not spray casing soil or mushrooms.

TOBACCO - Seedcorn Maggot: Use 550-850 grams per hectare. Apply in planting water, using 1800 or more litres per hectare. **ARBORVITAE - Leafminers:** Use 1 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary. Scale Insects (crawlers): Use 1.5 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

ORNAMENTALS

ARALIA, IVY - Privet Mite: Use 1.0 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

AZALEA - Leafminers, Privet Mite: Use 1.0 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

BIRCH, BOXWOOD, OAK - Leafminers: Use 1.0 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

CARNATION - Aphids, Caterpillars, Leafminers, Spider Mites, Thrips: Use 1.5 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

CHRYSANTHEMUM - Aphids, Caterpillars, Leafminers, Spider Mites Thrips: Use 1.0 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

HOLLY - Leafminers: Use 1.0 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary. **Aphids, Bud Moths:** Use 2.0 kg in 1000 litres of water. Spray when new growth is 0.6 cm long and before blossoms open.

JUNIPER - Scale Insects (crawlers): Use 1.5 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

PINES, TAXUS - European Pine Shoot Moth, Scale Insects (crawlers): Use 1.5 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

ROSES - Aphids, Rose Chafer: Use 1.5 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

EUONYMUS - Scale insects (crawlers): Use 1.5 kg in 1000 litres of water. Spray when insects first appear. Repeat as necessary.

BARRIER STRIPS, DITCHBANKS, FENCE ROWS, NON-CROPPED AREAS, PASTURE, RANGE LAND, ROADSIDES, WASTE LANDS - Grasshoppers: Use 1.0 kg per hectare. Apply in sufficient water for thorough coverage. Repeat as necessary. Do not spray during bloom to avoid injury to pollinating insects. Do not re-treat for 30 days. Dairy and beef cattle may be grazed or fed green forage immediately after application. Hay may be fed if not cut for 21 days following application.

MARGINS OF FIELD CROPS - Grasshoppers: Use 1.0 kg per hectare. Apply when insects first appear. Use sufficient water for thorough coverage. Treat a strip inside the crop as well as the headlands and margins outside the crop. Do not treat field crops within 14 days of harvest. Do not spray during bloom to avoid injury to pollinating insects. Do not re-treat for 30 days. Dairy and beef cattle may be grazed or fed green forage immediately after application. Hay may be fed if not cut for 21 days following application.

SEED TREATMENT

BEAN, CORN, PEA, SOYBEAN, SUGARBEET - Root Maggots: Use 62.5 grams per 100 kg seed. Apply dry or as a slurry. Do not store treated seed more than 3 months before planting. Apply only in conjunction with or over a fungicidal treatment. Allow seed to dry before bagging or seeding.

ONION, RADISH - Root Maggots: Use 125 grams per kg seed. Wet seed with a 2% solution of methyl cellulose. Mix with insecticide until seed is well coated. Some delay in seeding emergence and some reduction in stand may occur. Allow seed to dry before bagging or seeding.

PRECAUTIONS

- 1. KEEP OUT OF THE REACH OF CHILDREN.
- 2. May be fatal if swallowed.
- 3. Harmful if inhaled or absorbed through the skin.
- 4. Avoid contact with eyes, skin and clothing.
- 5. Avoid breathing fog, dust, or spray mist.
- 6. Wash thoroughly after handling and before eating, drinking or smoking.

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

SYMPTOMS OF POISONING

Headaches, giddiness, blurred vision, nervousness, weakness, nausea, cramps, diarrhea, discomfort in the chest, sweating, moisis, tearing, salivation and other excessive respiratory tract secretion, vomiting, cyanosis, papilledema, uncontrollable muscle twitches, convulsions, coma, loss of reflexes, and loss of sphincter control.

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 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.

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.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION

Diazinon is a cholinesterase inhibitor. Atropine is antidotal. Use 1 to 2 mg every 15 to 30 minutes if necessary.

DISPOSAL

- 1. Triple-or pressure-rinse the empty container. Add the rinsing to the spray mixture in the tank.
- 2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
- 3. Make the container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. 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 the product.

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