COMMERCIAL

VANQUISH

EMULSIFIABLE CONCENTRATE

FOR USE IN CROP LAND AND FARM AREAS, OUTDOORS, LIVESTOCK AND POULTRY INDUSTRIAL LOCATIONS, FLOUR MILLS

CAUTION POISON

GUARANTEE: MALATHION......500 g/L

PRECAUTION KEEP OUT OF REACH OF CHILDREN SEE SIDE PANEL FOR ADDITIONAL CAUTIONS

REGISTRATION NO. 18184
PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING

NET CONTENTS

MADE IN CANADA

KEM MFG. CANADA 660 CAMPOBELLO RD., MISSISSAUGA, ONTARIO L5N 2L9

PLANTS: EUROPE/LATIN AMERICA/CARIBBEAN/CANADA/AFRICA/U.S.A.

AGRICULTURAL AND GARDEN CROPS

Apply VANQUISH at the rates indicated. Make repeat applications as needed unless otherwise indicated.

ALFALFA: For control of alfalfa weevil larvae, aphids, grasshoppers, leafhoppers, spider mites. Apply 2.25 to 2.75 L per hectare in sufficient water for good coverage. Do not apply when in bloom. Apply when 75% of foliage shows feeding damage.

CLOVER: For control of aphids, grasshoppers leafhoppers, spider mites. Apply 2.25 to 2.75 per hectare in sufficient water for good coverage. Do not apply to clover in bloom.

CORN (GRAIN, FORAGE): For control of earworms, European corn borer. Apply 2.25 to 2.75 L per hectare in sufficient water for good coverage. Do not make application within 5 days of harvest. Apply when 10% of ears show silk. Repeat at 3-5 day intervals until 4-5 applications are made.

FLAX: For grasshoppers control. Apply 1.1 to 1.75 L per hectare in sufficient water for good coverage. Treat when bees are absent from field and temperature is above 18 deg. C.

GRAIN, CROPS: BARLEY, OATS, WHEAT, RYE: For control of armyworms, English grain aphids, greenbugs, winter grain mites. Apply 1.1 to 2.75 L per hectare in sufficient water for good coverage.

MUSTARD, RAPE: For control of flea beetles, grasshoppers. Apply 1.1 to 1.75 L per hectare in sufficient water for good coverage. For control of diamondback moth larvae, apply 0.55 to 0.85 L per hectare. Apply when bees are absent from field and the temperature is above 18 deg. C.

POTATO: For control of aphids, Colorado potato beetles, leafhoppers, spider mites. Apply 1.5 to 2.25 L per hectare in sufficient water for good coverage. Do not make application within 3 days of harvest.

MUSHROOM BEDS: For control of mites, phorid flies, sciarid flies. Use 25 to 40 mL of concentrate in 11 L of water per 100 m2 of bed area. Apply immediately after picking. Repeat about twice per week or as required. The same concentration may be sprayed or painted on wooden surfaces in mushroom houses to the point of run-off as needed. Avoid spraying on bed surfaces when time of application differs from that recommended for mushroom beds. Do not make application within 2 days of harvest.

NOTE: Do not make application of VANQUISH to the listed crops within 7 days of harvest, other than those crops indicated with a shorter time limitation.

FLY, LOUSE, MOSQUITO AND BLACKFLY CONTROL IN FARM AREAS AND OUTDOOR AREAS. FARM BUILDINGS AND PET QUARTERS: For control of house flies. Thoroughly mix 1 to 2 L of concentrate in 100 L of water, or 100 to 200 mL to 10 L of water. Apply thoroughly to walls, floors, ceilings and manure piles. Use 5 to 10 L of mixed insecticide to 100 m2 of surfaces area. The addition of sugar (4 kg/100 L or 400 g/10 L) serves as a fly attractant. Repeat after

2 or 3 weeks or as necessary to maintain control. Allow 14 days before applying to freshly whitewashed surfaces. Good sanitation is essential to effective fly control. Do not use in dwellings or milk processing rooms.

FARM YARDS, PENS, FEEDLOTS, PASTURES, MANURE PILES, GARBAGE DUMPS AND OUTDOOR AREAS AROUND SHRUBBERY: For control of house flies, mosquitoes, stable flies, gnats and blackflies. Apply at the rate of 1.1 L of concentration per hectare (example: Mix 1.1 L of concentrate in 10 L of water or oil). Apply as a fog, aerosol or space spray at the rate of 10 L of mixed insecticide per hectare. Repeat as necessary to maintain control. Avoid contamination of feed or food products. Avoid applying oil-based sprays to valuable ornamental plants.

To control mosquito larvae in standing water (self contained) apply 1.1 L per hectare in an oil or water solution, in sufficient volume of liquid to attain good coverage. Obtain coverage using ground application equipment. Do not apply to water draining into public waterways. Use about 100 L of mixed insecticide per ha.

INSECT CONTROL ON ORNAMENTAL PLANTS - OUTDOORS: For control of aphids, bagworms, European pine shoot moths, lace bugs, leafhoppers, leafminers, mealybugs, plant bugs, sawflies, scale insects, spider mites, tent caterpillars, thrips and Pine needle scale on flowers, shrubs and trees. Mix 150 to 300 mL of concentrate to 10 L of water and spray 1.000 square metres. Spray thoroughly at the first sign of insect pests, or insect damage. Repeat as necessary to maintain control. For larger areas, apply at the rate of 1.5 to 2.75 L per hectare in sufficient water for good coverage. Do not treat any plants during bloom.

Caution: Injury may occur on certain ferns, petunias, African violets, crassula and Canaerti Juniper and viburnum. Injury is more likely to occur under conditions of extreme heat, drought or disease. Use of this product would not be recommended under the mentioned conditions.

LIVESTOCK AND POULTRY

CATTLE (BEEF AND NON-MILKING DAIRY CATTLE): For control of gnats, lice, ticks and mosquitoes. Mix 100 mL of concentrate in 10 L water, or 1 L concentrate to 100 L of water. Apply spray thoroughly to animals. Avoid treating eyes, ears, nose. Repeat treatments if necessary to maintain control. Do not contaminate feed or water toughs. Do not apply to dairy animals within two weeks of freshening.

CATTLE (BEEF AND DAIRY): For control of horn flies and lice. Mix 400 mL of concentrate to 10 L of oil, or 4 L concentrate to 100 L of oil. Use in back-rubber device. One device should be continuously available for each 35-45 head of cattle. Refill applicator every 2 to 3 weeks.

GOATS AND SHEEP: For control of lice, keds and ticks. Mix 100 mL of concentrate in 10 L of water, or 1 L of concentrate to 100 L of water. Spray animals thoroughly. Repeat in 2-3 weeks if necessary. Do not use on milk goats.

SWINE: For control of sarcoptic mange mites. Mix 200 mL of concentrate in 10 L of water, or 1 L concentrate to 100 L of water. Apply 2 L of mixed insecticide per animal. Repeat in 12 days if necessary.

Note: In the case of all four (4) uses listed, do not apply to animals under one month of age. Do not apply to animals nursing young. Treatment may be done up to tome of slaughter.

POULTRY HOUSES: For control of all species of chicken lice, spray mixture of 600 mL of concentrate in 10 L of water, or 6 L of concentrate to 100 L of water. Apply treatments to get thorough coverage of nests, roosts, floors and litter. Do not apply directly to birds. Repeat as needed. For control of chicken mites, spray a mixture of 200 mL of concentrate in 10 L of water, or 2 L of concentration to 100 L of water. Apply as listed for mite control. Shipping crates may also be treated after use.

In all cases, avoid contamination of feed or water troughs. Do not apply to poultry within one week of slaughter. Wait 14 days before applying to freshly whitewashed surfaces.

INDUSTRIAL PESTS DWELLINGS (HOTELS, MOTELS), DAIRIES, FLOUR MILLS, FOOD PROCESSING PLANTS: For control of ants, booklice, carpet beetles, clothes moths, cockroaches, crickets, earwigs, flies, grain insects, lice, mites, mosquitoes, silverfish, spiders, springtails and weevils. Mix 10 to 35 mL of concentrate per litre of water, and apply to surfaces such as window sills, walls and areas infested with insects, or areas where insects gather. Repeat as necessary to maintain control.

PET QUARTERS (CATS AND DOGS): For control of fleas. Mix 25 to 50 mL of concentrate per litre of water. Clear area to be treated of bedding and debris before application. Apply 5 L of mixed insecticide per 100 m2 and provide fresh bedding after treatment.

BEDS, MATTRESSES, WOODWORK: For bedbug control. Mix 10 ml of

concentrate in 1 L of deodorized kerosene or insecticide base oil. Mist into bed surfaces and woodwork where bedbugs are hiding. Do not contaminate bedding, food, dishes or utensils.

Note: In the case of all indoor application, do not contaminate food or utensils. Food should be removed from area or adequately covered before spraying. Surfaces subject to direct contact with food should be thoroughly cleaned to remove insecticide residues and dead insects after spraying. Malathion sprays may damage some finished surfaces and fabrics, so caution should be exercised.

Caution: In meat packing and food processing plants, only spray when plant is not in operation. No exposed food products, ingredients or packaging materials to be left in the room. Cover food handling equipment. Any treated surface that may contact meat food products or other food products should be washed and rinsed thoroughly with potable water after spraying and before re-use for food processing.

GARDEN AREAS, OUTSIDE FOUNDATIONS, AND YARDS: For control of ants, clover mites, grasshoppers, millipedes, spiders and sowbugs. Mix 60 mL of concentrate per L of water and apply mixed insecticide where insects congregate. Repeat at 9 to 10 day intervals until control is obtained. For clover mites apply to exterior wall surfaces and grass along building foundations. Do not apply to edible plants.

MUNICIPAL DUMPS, REFUSE AREAS AND SEWAGE LINES: For cockroach control. Mix 60 mL of concentrate per L of water or oil and wet areas requiring treatment. Repeat as necessary to maintain control.

FLOUR MILLS, GRAIN ELEVATORS, GRAIN BINS (EMPTY) AND BOX CARS: For control of confused flour beetles, flat grain beetles, granary weevils, grain mites, Indian meal moths, lesser grain borers, red flour beetles, rice weevils, rusty grain beetles and saw-toothed grain beetles: Mix 1 L of concentrate per 15 L of water or 15 L of deodorized kerosene or insecticide base oil. Before spraying clean premises thoroughly, including floors, walls, under and behind machinery or equipment. Remove and burn all sweeping debris. Apply mixed insecticide as a coarse spray to the point of run-off, at the rate of 5 L to 100 m2. Re-clean before any re-treatment, and maintain good sanitation at all times.

FLOUR MILLS: Spray walls, floors ceilings, under and behind milling machines, bins and areas where insects may hide and breed. Pay particular attention to cracks and crevices from which insects emerge. Clean and spray floors and walls of the

warehouse before stockpiling of sacked or boxed flour or sack bundles.

Grain Elevators and Granary Bins: Whenever these areas become empty, clean up debris as outlined in previous instructions, they spray every three weeks, clean and spray the work floor, walls and surrounding areas. Begin to apply spray to bins 2 to 4 weeks before introduction of grain. Repeat as necessary while bins are empty.

Grain Box Cars: Before loading, clean, then starting at a point on the interior wall of the car about 60 cm above estimated sack line level, spray the walls and floor, using 4-5 L of spray per car. Allow sprayed car to stand empty with door open until the spray has thoroughly dried. Line the walls and floor of the car with kraft paper and then load.

PRECAUTIONS: Do not apply to grain or flour. Application must be made by trained and experienced personnel. Do not store grain in treated areas until insecticide spray has thoroughly dried. This insecticide must be applied only to empty grain holding facilities. Do not apply directly to grain or flour. Do not apply directly on grain milling equipment while the mill is in operation.

PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. Harmful by swallowing, inhalation or skin contact. Avoid breathing spray mist. Avoid contact with skin. Wash thoroughly after handling. Change contaminated clothing. Do not contaminate food, feed products, or water supplies. Do not treat dairy barns.

FIRST AID: In case of exposure to Malathion, move patient from area and remove all contaminated clothing. Wash all exposed skin with soap and water. If in eyes, flush with water for 15 minutes and get medical attention. If breathing is weak or irregular give artificial respiration. Get prompt medical attention. If swallowed, give patient 1-2 glasses of water and cause vomiting by giving a dose of ipecac or by inducing vomiting by inserting a finger down the throat. DO NOT TRY TO CAUSE VOMITING IF PATIENT IS UNCONSCIOUS OR IN A CONVULSIVE STATE. Get prompt medical attention.

TOXICOLOGY: Symptoms of poisoning include headache, weakness, sweating, giddiness, blurred vision, nausea, abdominal cramps, diarrhea, and discomfort in chest. Atropine is antidotal. Give 2 to 4 mg of atropine sulphate intramuscularly or intravenously immediately and every hour as required until pupil dilate.

DISPOSAL PROCEDURES: Malathion breaks down rapidly in the presence of water and alkaline materials. Containers and

spillages can be readily decontaminated by the use of Javex or lye, or washing soaps containing sodium hydroxide. Residues of Malathion can be buried in a suitable disposal area by first putting down a layer of soda ash or hydrated lime and by pouring in the Malathion, adding another layer of soda ash or lime and by pouring a mixture of Javex and water, then filling in the hole. The amount of lime and Javex would be dependent upon the amount of Malathion encountered. Empty container can be filled with lye or strong soap detergent solution and left to stand for 24 hours. After washing, dispose of solution in a lime bed. Crush and bury the containers.

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

NOTICE TO BUYER: Seller's guarantee shall be limited to the terms set out on the label and subject thereto. The buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

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