95.10.06

SALMOSAN (TM) LIQUID

ACARICIDE for the Control of Sea Lice on fish reared in aquaculture sites in Eastern Canada

RESTRICTED

GUARANTEE:

Azamethiphos 10g/L

READ LABEL AND ATTACHED BROCHURE BEFORE USING

KEEP OUT OF REACH OF CHILDREN

POTENTIAL SKIN SENSITIZER

REGISTRATION NO. 24274

PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING CALL 1-800-267-6351

Net Contents:

5 or 10 Litre containers. One Litre of Salmosan Liquid will treat 100 m³ of water.

> Ciba-Geigy Canada Ltd. Animal Health Division 6860 Century Avenue Mississauga, Ontario L5N 2W5

REFER TO BROCHURE FOR USE DIRECTIONS AND COMPLETE LABEL INFORMATION.

FIRST AID:

If you have breathing problems or if you have felt persistently unwell after using a product containing an organophosphorus compound you should consult your doctor before working with SALMOSAN Liquid product. IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, seek advice immediately. Tell the doctor you have been using SALMOSAN which contains azamethiphos, an organophosphorus compound.

INGESTION: Medical aid necessary. Prevent exertion. CALL DOCTOR AT ONCE or Poison Control Centre and retain the label. Watch respiration and institute artificial respiration at first signs of respiratory failure. Remove contaminated clothing.

SKIN CONTACT: Wash hands and exposed skin with soap and water.

EYE CONTACT: Flush with clean water for 15 - 20 minutes. Seek medical advice.

INHALATION: Remove to fresh air. Keep at rest and keep warm.

TOXICOLOGICAL INFORMATION:

The symptoms of mild poisoning from organophosphorus compounds are a feeling of exhaustion and weakness which may be accompanied by cramp-like abdominal pains, diarrhoea, excessive sweating, constricted pupils and salivation up to 24 hours after exposure. Severe poisoning can cause general muscle twitching and convulsions.

Azamethiphos is a Cholinesterase inhibitor. Antidote: Atropine under medical supervision. Inject 2 to 4 mg atropine sulphate (for children 0.5 to 2 mg according to age) iv or i.m. every 5 to 10 minutes until signs of atropinisation occur. The patient must remain atropinised for a sufficient length of time (25 to 48 hours) to prevent subsequent poisoning due to delayed resorption.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. May cause sensitization by inhalation and skin contact. Avoid all contact by mouth, with skin or eyes. Accidental splashes on exposed skin or eyes should be washed off immediately with plenty of water. Wash hands, face and exposed skin before eating, drinking, or smoking, and after leaving the work area. Wash all protective clothing thoroughly after use, especially the insides of gloves. Wear suitable protective clothing (waterproof coveralls), suitable protective gloves (heavy duty gauntlet style nitrile or chemical resistant gloves at least 300 mm in length and 0.5 mm thick are recommended), and face protection (face shield) when handling the concentrate (i.e. mixing and transferring product from one container to another and when applying the diluted chemical to the pen. Renew protective clothing and gloves regularly and certainly when cracking or damage has occurred. Store in the original, unopened packaging in a well-ventilated room. Store in a dry place. Protect from sun and humidity. Avoid contamination of food, feed and domestic water supplies.

PRODUCT DECONTAMINATION AND DISPOSAL:

- 1. Make the empty concentrate container, and dilution containers unsuitable for further use.
- 2. Dispose of the concentrate container, and dilution container in accordance with the provincial requirements.
- 3. For information on the disposal of unused, unwanted product, and the cleanup of spills, contact the provincial regulatory agency or the registrant.

SALMOSAN (TM) LIQUID

ACARICIDE for the Control of Sea Lice on fish reared in aquaculture sites in Eastern Canada

RESTRICTED

GUARANTEE:

Azamethiphos 10g/L

READ LABEL AND ATTACHED BROCHURE BEFORE USING

KEEP OUT OF REACH OF CHILDREN

POTENTIAL SKIN SENSITIZER

REGISTRATION NO. 24274

PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING CALL 1-800-267-6351

Net Contents:

5 or 10 Litre containers. One Litre of Salmosan Liquid will treat 100 m³ of water.

> Ciba-Geigy Canada Ltd. Animal Health Division 6860 Century Avenue Mississauga, Ontario L5N 2W5

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.

NATURE OF RESTRICTION:

For use in the control of sea lice causing damage in fish farm production (marine aquaculture) under the supervision of Fish veterinarians and certified pesticide applicators as defined by provincial permit conditions.

RESTRICTED USE:

GENERAL INFORMATION:

SALMOSAN should be applied to salmon infested with mature (pre-adult or adult) sea lice (Lepeophtheirus salmonis) or Caligus elongatus) before the stage at which serious skin damage is evident. Mortality may occur where fish are severely stressed or injured. The exact timing of a treatment programme is a matter of expertise and judgement; operators must seek the advice of the prescribing veterinarian. Do not use SALMOSAN prophylactically. Only use when infestation with adult lice has been diagnosed.

Timing of application: SALMOSAN does not affect juvenile attached sea lice including chalimus stages which will be present with the pre-adult and adult stages. These juvenile stages may develop into pre-adults and adults in 10 to 20 days, when a population count should show whether a second treatment is necessary. A third treatment may be necessary after another 14 days. Do not treat within 48 hours of slaughter.

Application rates: Fish infested with lice should be bathed in 0.2 ppm SALMOSAN (0.1 ppm azamethiphos) for a period of not less than 30 minutes and not more than 60 minutes.

Note: This SALMOSAN Liquid needs to be used within 48 hours after formulating in water.

Oxygenation must be provided during treatment. Vigorous oxygenation is recommended in the treatment cage. Where several cages are to be treated a large reservoir of oxygen bottles should be available. During treatment, careful observation of fish behaviour must be maintained. If signs of distress, e.g. fish falling on their sides, occur, remove tarpaulin and ensure vigorous oxygenation of the water.

Note: At water temperatures above 10 deg C., it is advisable to limit treatment periods to 30 minutes.

The Bath Technique:

In this technique, the depth of the fish cage net is reduced to a known depth at the centre, e.g. 2 metres, and a tarpaulin placed around the net so that it is totally enclosed. Ensure the base of the cage is not drooping when in the raised position as fish may congregate and come to harm. Oxygen is immediately bled into the system and SALMOSAN is added. Remove tarpaulin after 30 to 60 minutes. Use oxygen meter throughout treatment period.

DIRECTIONS FOR USE:

One Litre of SALMOSAN Liquid will treat 100 m³ of water (each litre contains 20 g of SALMOSAN 47.5% WP). Follow introduction procedure to fish pens under tarpaulin (bath) treatment. The pen size, numbers of fish, age and size of the fish and depth of dry up (amount of water in the pen using a tarpaulin to reduce water volume) can affect the amount of SALMOSAN Liquid needed to treat each pen. Timing for best treatment period should consider tidal movements (flushing rates) at the site which could affect dispersal of SALMOSAN once the tarpaulins are removed.

When fish are ready to be treated, the SALMOSAN Liquid should be further diluted in a ratio of 1 L/20 L sea water in a minimum of 400 L and gently stirred for 5 minutes. This latter mixture should then e immediately and carefully added to the cage by slowly pouring or pumping the mixture into the water at the oxygen diffuser points using The Bath Technique.

This chart is for information and can act as a guide to the amount of azamethiphos needed. The amount to be used in individual pens will be the responsibility of the certified applicator based on site conditions as described above.

TYPE OF PEN	SIZE AMOUNT OF WATER IN PEN M ³ FULL VOLUME	NUMBERS OF FISH (1000'S) HOLDING CAPACITY OF PEN BASED ON MARKET SIZED FISH	ESTIMATED AMOUNT OF AZM NECESSARY PER PEN TYPE (#L SALMOSAN LIQUID) IN HALF VOLUME (DRY UP)*
9.5 m octagon	$400 - 500 \text{ m}^3$	2 to 3	20 - 25 g (2 - 2.5 L)
12 m square	600 m ³	4	30 g (3 L)
15 m square	850 m ³	5.5	42.5 g (4.25 L)

40 m polar	850 m ³	4	42.5 g (4.25 L)
50 m polar	1,000 m ³	7 to 9	50 g (5 L)
70 m polar	2,000 m ³	9 to 25	100 g (10 L)
80 m polar	3,000 m ³	15 to 30	150 g (15 L)

* rate is based on a maximum rate 0.1 ppm Azm or 100 mg/m³, figures reflect volume dry up to $\frac{1}{2}$ pen volume in Bath treatment, one needs to take into consideration: fish age, size, # of fish and amount of dry up.

FIRST AID:

If you have breathing problems or if you have felt persistently unwell after using a product containing an organophosphorus compound you should consult your doctor before working with SALMOSAN Liquid product.

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, seek advice immediately. Tell the doctor you have been using SALMOSAN which contains azamethiphos, an organophosphorus compound.

INGESTION: Medical aid necessary. Prevent exertion. CALL DOCTOR AT ONCE or Poison Control Centre and retain the label. Watch respiration and institute artificial respiration at first signs of respiratory failure. Remove contaminated clothing.

SKIN CONTACT: Wash hands and exposed skin with soap and water.

EYE CONTACT: Flush with clean water for 15 - 20 minutes. Seek medical advice.

INHALATION: Remove to fresh air. Keep at rest and keep warm.

TOXICOLOGICAL INFORMATION:

The symptoms of mild poisoning from organophosphorus compounds are a feeling of exhaustion and weakness which may be accompanied by cramp-like abdominal pains, diarrhoea, excessive sweating, constricted pupils and salivation up to 24 hours after exposure. Severe poisoning can cause general muscle twitching and convulsions.

Azamethiphos is a Cholinesterase inhibitor. Antidote: Atropine under medical supervision. Inject 2 to 4 mg atropine sulphate (for children 0.5 to 2 mg according to age) iv or i.m. every 5 to 10 minutes until signs of atropinisation occur. The patient must remain atropinised for a sufficient length of time (25 to 48 hours) to prevent subsequent poisoning due to delayed resorption.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. May cause sensitization by inhalation and skin contact. Avoid all contact by mouth, with skin or eyes. Accidental splashes on exposed skin or eyes should be washed off immediately with plenty of water. Wash hands, face and exposed skin before eating, drinking, or smoking, and after leaving the work area. Wash all protective clothing thoroughly after use, especially the insides of gloves. Wear suitable protective clothing (waterproof coveralls), suitable protective gloves (heavy duty gauntlet style nitrile or chemical resistant gloves at least 300 mm in length and 0.5 mm thick are recommended), and face protection (face shield) when handling the concentrate (i.e. mixing and transferring product from one container to another and when applying the diluted chemical to the pen. Renew protective clothing and gloves regularly and certainly when cracking or damage has occurred. Store in the original, unopened packaging in a well-ventilated room. Store in a dry place. Protect from sun and humidity. Avoid contamination of food, feed and domestic water supplies.

ENVIRONMENTAL HAZARDS:

- 1. SALMOSAN is dangerous to many organisms. The fastest and therefore most important detoxification mechanism in coastal waters is dilution which is increased by water movements, including the flushing effect of sea tides.
- 2. SALMOSAN is dangerous to fish and other aquatic organisms in the concentrated form or in improper use dilutions. Do not contaminate ponds, streams or inlets with product or unused packaging.

PRODUCT DECONTAMINATION AND DISPOSAL:

- 1. Make the empty concentrate container, and dilution containers unsuitable for further use.
- 2. Dispose of the concentrate container, and dilution container in accordance with the provincial requirements.
- 3. For information on the disposal of unused, unwanted product, and the cleanup of spills, contact the provincial regulatory agency or the registrant.

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.

This label transcript service is offered by the Pest Management Regulatory Agency to provide efficient searching for label information. This service and this information do not replace the official hard-copy label. The PMRA does not provide any guarantee or assurance that the information obtained through this service is accurate, current or correct, and is therefore not liable for any loss resulting, directly or indirectly, from reliance upon this service.

+))