

Sub. No. 2014-1044  
2014-06-12

**INTEROX® PARAMOVE® 50**  
**For the Control of Sea Lice on Salmon in Fish Farms**

**RESTRICTED**  
**FOR EMERGENCY USE ONLY**  
**FOR SALE AND USE IN NEW BRUNSWICK, NOVA SCOTIA, NEWFOUNDLAND**  
**AND LABRADOR, AND BRITISH COLUMBIA**  
**FROM JUNE 12, 2014 TO JUNE 11, 2015**

**GUARANTEE:** Hydrogen Peroxide 50%

**REGISTRATION NO.:** 29783 PEST CONTROL PRODUCTS ACT

**READ THE LABEL BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**  
**POISON**



***DANGER***  
**CORROSIVE TO EYES AND SKIN**

**NET CONTENTS:** 208 L, 1249 L, 17034 L, 75708 L

**PRODUCT MUST BE APPLIED BY A PROVINCIALY CERTIFIED AND  
TRAINED APPLICATOR**

**Manufacturer:**

Solvay Chemicals Inc.  
3333 Richmond Ave.  
Houston, TX 77098, USA  
713/525-6500

For emergencies call: CHEMTREC®; 800/424-9300 24h.

**Canadian Contacts:**

**New Brunswick, Nova Scotia, and Newfoundland and Labrador:** New Brunswick  
Department of Agriculture and Aquaculture  
850 Lincoln Rd.  
Fredericton, NB  
E3B 5H1

**British Columbia:**  
Fisheries and Oceans Canada – Pacific Region  
200-410 Burrard Street  
Vancouver, B.C.

**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.

**NATURE OF RESTRICTION:** Only to be used under the direct supervision of a veterinarian. Only to be applied by individuals who are provincially certified and trained in the application of this product and who hold a pesticide applicator certificate or license recognized by the provincial/territorial pesticide regulatory agency where the application occurs. This product is to be used only in the manner authorized. Consult local pesticide regulatory authorities about use permits which may be required. A report detailing each treatment must be submitted to the Pest Management Regulatory Agency's Environmental Evaluation Directorate.

**RESTRICTED USES:**

Interox® Paramove® 50 is effective for the removal of Sea Lice (*Lepeophtheirus* spp. and *Caligus* spp.) in farmed Atlantic salmon. Interox Paramove 50 does not remove all growth stages; therefore it should not be used prophylactically. It should be used to treat fish infested with post-chalimus growth stages and before serious skin damage is evident. Repeat treatments may be necessary.

**DIRECTIONS FOR USE:**

Interox Paramove 50 is administered as an external bath treatment by either using well boats or completely enclosed tarpaulins. Treat only when thresholds are reached as directed by a veterinarian.

Interox Paramove 50 must be added as quickly as possible, while avoiding splashing, to reach the target concentration within the shortest timeframe. Fish to be treated should be starved for at least 24 hours pre-treatment. Do not administer to fish weighing less than 200 g mean bodyweight or fish exhibiting signs of gill damage. Steps should be taken to remove lice floating on the water after treatment to prevent re-infestation. Allow for a minimum of 7 days between applications. Do not apply more than 5 applications of Interox Paramove 50 per year.

The optimum treatment to remove infestations of sea lice is an immersion in a solution of Interox Paramove 50 at a concentration of 1500 ppm of hydrogen peroxide for a period of 20 minutes at temperatures up to 13°C (55°F). Interox Paramove 50 treatments may be extended for up to 30 minutes if desired. Shorten treatment time if concentration exceeds 1800 ppm and/or water temperature is higher than 13°C (55°F). If concentration exceeds 2000 ppm, stop treatment immediately. Additional guidance is provided in the table below:

<b>Water Temperature</b>	<b>Hydrogen Peroxide Concentration (ppm or mg/L)</b>	<b>Amount of Interlox Paramove 50 in Sea Water (g / L)</b>
Below 8°C	1700 - 1800	3.4-3.6
8 - 10 °C	1550 - 1700	3.1-3.4
10 -14°C	1400 - 1550	2.8-3.1
Greater than 14°C	1200 – 1400	2.4-2.8

**NOTES:**

- Temperatures greater than 13°C and/or exposures longer than 20 minutes may result in damage or mortality of treated fish. Use extreme caution when applying at higher temperatures. Discontinue treatment and flush with sea water immediately if signs of distress in fish are observed.
- Efficacy of treatment may be reduced when using concentrations below 1500 ppm.

The fish to be treated must either be crowded into a small area of the production net and completely encircle with a tarpaulin or transferred into a well boat confinement area. Fish must not be crowded to the point where scale loss occurs. Water temperature and dissolved oxygen levels will dictate the stock density in the treatment area. Supplemental oxygen must be supplied during crowding and treatment.

The volume of water entrapped must be calculated (surface area of treatment area times the depth of the enclosed pen/well minus the fish biomass = cubic metre) and the estimated quantity of INTEROX PARAMOVE 50 required to achieve the target concentration indicated above should be added using a dedicated dosing system, such as a pump with venture and hoses/pumps for the enclosed tarpaulin method and a batch controller for the well boat method.

Representative water samples from the treatment area must be taken at regular times during the treatment period and tested to determine the concentration of hydrogen peroxide. The first sample should be taken at least 5-8 minutes after the start of the addition of Interlox Paramove 50 to the fish pen and then taken at regular intervals thereafter (e.g., 15, 20, 30 minutes) to ensure that the concentration of hydrogen peroxide is maintained for the entire duration of the treatment. The requirement to add more Interlox Paramove 50 or shorten the treatment period is based on these analytical

results. Concentrations can be reduced by pumping fresh sea water into the treatment enclosure.

**PRECAUTIONS FOR SALMON:**

Hydrogen peroxide has a short term adverse effect on fish gills. This is aggravated when gills have been damaged or compromised pre-treatment. Treatments must not be carried out if; 1) there has been or is an algal or plankton bloom, or 2) there is high organic and/or metal loading in the water of the treatment pens. Treatments must not be considered if the Secchi disc reading is less than 4 metres. If there is any doubt, it is advisable to have histology studies carried out on samples of gill before treatment. Net changes, grading and other management procedures that stress fish must be avoided the week before treatment.

Crowding of fish as per the treatment instructions may stress fish. Dissolved oxygen meters must be used to monitor oxygen levels at all times. Supplemental oxygen must be supplied to the pen during the crowding period, setting of the enclosed tarpaulin or introduction into the wells and during treatment. The oxygen supply may be ambient level. Greater care is required in monitoring dissolved oxygen levels and stress as water temperatures increase.

Irrespective of concentration of Interlox Paramove 50 achieved, extended exposure times are toxic to fish. Treatment times must not be extended beyond 30 minutes from the achievement of the target concentration of Interlox Paramove 50 in the treatment pen/well. Discontinue treatment and flush with sea water immediately if signs of distress in fish are observed.

Monitor treatments for signs of distress by fish. If necessary (e.g., concentration of hydrogen peroxide exceeds 2000 ppm), take immediate steps to flush treatment area with fresh sea water using appropriate physical agitation.

A sample of water from the treatment area should be taken and analyzed for hydrogen peroxide concentration between 2 and 5 minutes after treatment is completed to ensure rapid removal of any residual hydrogen peroxide from the wells or enclosed tarpaulins. Target concentration of hydrogen peroxide in the treatment area at the end of the treatment is 0 ppm.

NOTE: Use only systems/procedures that are capable of determining hydrogen peroxide concentrations in sea water.

**PRECAUTIONS:**

KEEP CHILDREN AWAY FROM PRODUCT, CONTAINERS AND APPLICATION EQUIPMENT.

Interlox-Paramove 50 is an oxidising agent and will cause severe burns to skin and eyes. DO NOT get in eyes or on skin.

When using well boats, all workers/personnel involved in handling, storing, transferring, mixing, loading, applying the concentrate, clean-ups/repair and in activities immediately after application, must wear chemical resistant coveralls (Tyvek or PVC full chemical

splash protective suit) over a long-sleeved shirt and long pants, chemical splash proof face shield and chemical-resistant boots and gloves.

When applying to sea cages, all workers/personnel involved in handling, storing, transferring, mixing, loading, applying the concentrate, clean-ups/repair and in activities immediately after application, must wear a NIOSH approved respiratory protection for hydrogen peroxide (<http://www.cdc.gov/niosh/npg/npgd0335.html> ), chemical resistant coveralls (Tyvek or PVC full chemical splash protective suit) over a long-sleeved shirt and long pants, chemical splash proof face shield (when not wearing a full face respiratory protection) and chemical-resistant boots and gloves. Observe respirator use limitations specified by NIOSH and the manufacturer.

Wash thoroughly with soap and water after handling product and before smoking or eating. Harmful if swallowed. May be fatal if inhaled. Avoid inhalation of fumes. All clothing and equipment should be washed with copious amounts of clean water after use. Do not contaminate food, feed or water bodies by the storage or disposal of the product or by the cleaning of equipment. Ensure all connections are tight and free of leaks before using Interlox Paramove 50 dispersal systems. Contamination and/or spillage of Interlox Paramove 50 can cause violent chemical reactions and/or fire. Before use, all operators should have read and understood this label and the product (Material) Safety Data Sheet [MSDS]. Copious volumes of water should always be on hand in case of emergencies. Secure containers with non-flammable strapping. DO NOT use absorbent materials to absorb spillage. All containers should be kept closed and out of direct sunlight when not in use.

It is recommended that entry to fish farms areas is restricted until all treatments are completed.

It is also recommended that recreational activities in treated water near fish farm areas are not permitted until tidal flushing occurs.

**Fire:**

Extinguish with water only. If safe to do so, keep containers cool by spraying them with water if exposed to fire. Keep upwind

**FIRST AID:**

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 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 P.C.P Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:**

Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

**ENVIRONMENTAL HAZARDS:**

Toxic to aquatic organisms. Apply only to net pens enclosed by a tarpaulin or in a well boat. Product is designed for the treatment of fish; however, at levels greater than the treatment dose, the product could be harmful to fish and aquatic life.

**STORAGE:**

KEEP OUT OF REACH OF CHILDREN. Store product in original container in a cool place away from food, feed or other pesticides. Protect from prolonged exposure to direct sunlight. Store away from incompatible or flammable materials. Do not store bulk product for extended periods. In case of leakage or spill, flush area with large amounts of clean water and flush to drain in accordance with Federal/Provincial requirements. DO NOT flush into systems containing oil, fuel or other flammable materials. DO NOT use absorbent materials to absorb spillage. A clean water supply should be readily available for dealing with spills and supplying showers and/or eyebaths.

**DISPOSAL:**

1. Triple- or pressure-rinse the empty container. Add the rinsings to the treatment site or tank.
2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty, rinsed 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.

Before using, read Material Safety Data Sheet (MSDS) for this chemical.

C.A.S. #: 7722-84-1

Made in the USA

For Additional Information Contact  
Solvay Chemicals, Inc., 3333 Richmond Avenue,  
Houston, Texas 77098-3099  
Tel: 713/525-6500

For emergencies, call CHEMTREC®: 800/424-9300