



## Aquarium Solutions® Ich-X® SW

SAFE & EFFECTIVE DISEASE CONTROL FOR MARINE AQUARIUMS – REEF TESTED (SEE CONTRAINDICATIONS)

PRODUCT CODES: 73314 - 4 fl. oz, 73316 – 16 fl. oz and 73318 - 1 gallon

### PURPOSE AND BENEFITS

**Aquarium Solutions® Ich-X® SW** is a convenient, pre-diluted, formulation of formalin (37% formaldehyde solution) which is universally recognized as an effective medication for the treatment and control of diseases in saltwater aquarium fishes caused by fungi, protozoa and certain metazoans. When used as directed **Aquarium Solutions® Ich-X® SW** will control or prevent diseases of fishes caused by the following disease organisms: Cryptocaryon (saltwater "ich"), Amyloodinium, the common external fungal infections, certain external bacterial infections and diseases caused by monogenea and digenea. This is the definition of synergism.

### GENERAL DIAGNOSIS AND TREATMENT OF "SALTWATER ICH" (CRYPTOCARYONIASIS) DISEASE IN MARINE AQUARIUM FISHES

The following is a brief summary of the clinical signs often associated with "saltwater ich"; it is intended *only* as an aid for the beginning aquarist, and is not to be considered a definitive diagnostic key. It is important that the aquarist consult appropriate references for more specific information regarding aquarium fish diseases. Where possible, skin scrapes and/or gill smears should be made and examined by a qualified aquarium fish disease diagnostician (NOTE: few veterinarians are either qualified or interested in diagnosing aquarium fish diseases). The signs of "saltwater ich" in fish is usually evident by the appearance and persistence of numerous, small (but visible) white spots on the fishes' skin, scales, eyes and fins. The disease is often called "white spot disease". These spots are known as cysts. It must be understood that the cysts are usually found on the gills of the diseased fish and may not be visible without inspecting the gills. (NOTE: Once visible signs appear on other parts of the fish the disease can be well underway) The only outward sign of the involvement of the fishes' gills is labored respiration that is often accompanied by a drastic darkening or lightening of the fishes overall coloration. Fishes with "saltwater ich", where the white spots are not yet visible on the body will usually exhibit lethargy and repeated "flashing", or scratching and scraping, against sides or bottom of the aquarium or against objects in the aquarium.

### CLINICAL SIGNS AND TREATMENT OF OTHER DISEASES OF AQUARIUM FISHES

The following signs are general and may appear with some or all of the signs indicated above.

**Diseases Caused By Fungi (Saprolegniasis):** Saprolegniasis is often the easiest fish disease to properly diagnose. In most cases it is likely to be observed in necrotic (dead) tissue areas of aquarium fish which will be covered with whitish, hairy, or "cottony" patches. This fungal disease is almost always a secondary infection caused by stress or injury. Treating the aquarium, as directed, with **Aquarium Solutions® Ich-X® SW** in addition to directly swabbing the visible lesions on the fishes will often affect a cure in 24 hours or less. Swabbing must be done with a clean, cotton swab, and the swab must never be dipped more than once into the container of **Aquarium Solutions® Ich-X® SW**. Be sure to have plenty of clean, dry swabs ready to use. If damage is excessive, consider using **Aquarium Solutions® Bio-Bandage®** to speed healing.

**Amyloodiniasis (Velvet, Gold Dust Disease, Rust Disease):** This common saltwater fish disease causes the skin of diseased fishes to appear to have been dusted with a fine powder.

### SPECIFICATIONS

**DOSAGE:** **Aquarium Solutions® Ich-X® SW** is dosed at a rate of one teaspoonful (≈5 mL) per 10 gallons of water. This produces a nominal concentration of 15 mg/L of formalin. If you are using tap water, conditioning of the water with **Aquarium Solutions® ClorAm-X®** prior to making your salt mix is recommended to remove chloramines, chlorine and ammonia which can be toxic to your marine pets.

### CONTRAINDICATIONS

**Aquarium Solutions® Ich-X® SW** is similar to other formulations of formalin in that accidental or purposeful overdoses can *kill* aquarium fishes and other aquarium residents. Proper calculation of the actual amount of water within your system is required to avoid an overdose. (if you need assistance with this calculation please contact your local aquarium retailer or Hikari Sales USA, Inc.) Overdosing of this product **WILL NOT** speed recovery and in fact **WILL** cause severe damage to the inhabitants of your system. Do not use on fishes which have had a history of problems with formaldehyde-containing treatments. Do not use in aquariums for which the exact volume of water being treated is not known. Unless recommended by another authoritative source who has actual experience with this product, do not use **Aquarium Solutions® Ich-X® SW** at greater than the minimum, standard dosage. Do not use treatments more often than once every eight (8) hours,

and do not use where significant, pretreatment water changes are not possible. Pre-treatments water changes will help insure that the aquarium water is not heavily contaminated with dissolved or suspended, organic or inorganic matter that can seriously impair fish respiration or dissolved oxygen levels. Heavy organic load can seriously impair the effectiveness of this treatment. Do not use with any other disease treatments including copper-containing products. Copper-containing products, in particular, typically seriously impair the immune responses of marine fishes. Generally, fishes under stressful conditions can tolerate as much **Aquarium Solutions® Ich-X® SW** as they can in the absence of stress. However, heavily diseased fishes must be treated with caution, and if signs of stress increase (e.g. "piping" or gulping at the water's surface, heavy coughing, head or body jerking, or sudden, unprovoked darting about) an immediate water change (at least 50%) must be made. Removing the fishes to untreated water will, of course, help mitigate adverse reactions.

**Aquarium Solutions® Ich-X® SW** may be used in aquarium systems containing invertebrates such as shrimp, crayfish or snails, however, observe the reactions of these organisms carefully and immediately remove them from the treated water if they show adverse reactions. While **Aquarium Solutions® Ich-X® SW** has been tested on a wide variety of invertebrates and a multitude of reef environments, it must be noted that treating diseased fishes must always be performed in a separate quarantine/treatment (Q/T) tank. In many instances where a treatable disease has occurred in an aquarium with mixed animals types (e.g. a marine "reef" tank) and where removal of the diseased fishes is not possible it will often be best to revert to a method of control utilizing frequent and large water treatments along with the cleaning and replacement of filter media (where applicable). This control method will require patience and a suitable supply of prepared, properly conditioned, saltwater. It is important to note that this water change process could cause issues to xenia as they prefer water that is not "clean". In some rare cases xenia and delicate animals like feather dusters will not respond favorably during treatment. For this reason we strongly suggest that these types of animals be moved to a quarantine/treatment (Q/T) tank prior to initial treatment. If the decision to avoid this procedure is undertaken, frequent observance of these animals for the first six (6) hours is required. If any signs of stress are noted, an immediate water change (at least 50%) or immediate removal of these animal to a quarantine/treatment (Q/T) tank is necessary to avoid loss.

**Aquarium Solutions® Ich-X® SW** is not for human or veterinary medical use. It is not for use on food or game fishes. It is not for use in open water ways, rivers, streams, canals, irrigation ditches, lakes, recreational ponds, nor in aquarium or pond systems which empty directly into any such waters. To repeat, do not use **Aquarium Solutions® Ich-X® SW** with any other drugs or treatments (including any other "saltwater ich" treatments). Always remove carbon filtration, if used, and shut off foam fractionators ("protein skimmers"). Do not shut off water pumping, but cleaning mechanical filter media, prior to starting treatment, is recommended. Once the treatment is concluded replace the carbon with new material.

#### STABILITY

**Aquarium Solutions® Ich-X® SW** is stable for an indefinite period if kept in its original container and stored away from heat and cold. When not in use store tightly closed, at room temperature (above 60°F and below 100°F), and out of direct sunlight. Do not return unused portions to the original container and never allow the product to freeze.

#### CAUTIONARY STATEMENTS

**WARNING:** Undiluted **Aquarium Solutions® Ich-X® SW** is poisonous to humans and pets. **Aquarium Solutions® Ich-X® SW** may be fatal if swallowed. Avoid contact with eyes (may cause blindness) or skin. Always wash thoroughly with soap and warm water after handling. Keep away from food and feed.

**ANTIDOTE:** If swallowed, call a physician or Poison Control Center immediately. Drink one (1) or two (2) glasses of water and induce vomiting by touching the back of throat with finger, or if available, by administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious person. In case of contact immediately flush skin or eyes with plenty of tap water for at least 15 minutes; for eyes, get medical attention.

**CALIFORNIA WARNING:** **Aquarium Solutions Ich-X SW™** may contain ingredients known to the State of California to be potential or actual carcinogens (cancer causing) or teratogens (birth defects causing).

#### STANDARD TREATMENT PROCEDURES

The standard use-dilution of **Aquarium Solutions® Ich-X® SW** is 5 mL (1 teaspoon) per 10 gallons of aquarium water. Prior to starting treatment with **Aquarium Solutions® Ich-X® SW** perform a large, initial water change (at least 1/3 of the aquarium's present volume). Do not condition new water with any sulfinate-, or sulfoxylate-containing water conditioner as these products will interfere with the proper functioning of the treatment and will likely reduce dissolved oxygen in the treated water. If you are using tap water, conditioning with **Aquarium Solutions® ClearAm-X®**, prior to making your salt mix, is recommended to remove chloramines, chlorine and ammonia which can be toxic to your marine pets. A nearly complete water change, prior to the use of **Aquarium Solutions® Ich-X® SW**, will often prove to be highly beneficial to the ultimate success of the treatment. Repeat treatments, as necessary, with pre-treatment water changes of 10% to 25% depending upon the period between treatments. The closer together the treatments are the smaller the water change can be. A repeat treatment is required at least every 24 hours until a cure is affected. To be sure the disease conditions have been completely eliminated; continued treatment for no less than three (3) additional days is recommended. Re-treatment as often as every 8 hours is possible if the tank inhabitants can be closely observed and progress of the disease careful monitored. For such frequent re-treatments, the diseased fishes can be more easily observed in a Q/T tank environment. Observation of the cycle of the appearance and disappearance of the white spots

should dictate the course of follow-up treatment(s). At those times when the spots are gone, or reduced in number, the **Aquarium Solutions® Ich-X® SW** should be re-dosed following the recommended water change. After completion of treatment, we recommend adding **Aquarium Solutions® Stress-X®** or **Aquarium Solutions® Ultimate®** to your water to help repair any lost skin slim your fish may have encountered during the treatment regime.

#### **PACKAGING**

**Aquarium Solutions® Ich-X® SW** is packaged in convenient 4 fl.oz., 16 fl.oz., and 1 gallon sizes. All containers are fitted with child resistant (CR) closure (caps).

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