

# Approved Drugs for Use in Aquaculture



FLORFENICOL				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
AQUAFLO <sup>®</sup> Schering-Plough Animal Health Corp. 1-800-521-5767	Catfish	Control of <b>enteric septicemia</b> due to <i>Edwardsiella ictaluri</i>  Control of <b>columnaris disease</b> due to <i>Flavobacterium columnare</i> (Conditional Approval)	• 10 mg florfenicol/kg fish/d for 10 days	• Veterinary Feed Directive (VFD) drug • 12 day withdrawal time  • VFD drug • 12 day withdrawal time • Must use AQUAFLO <sup>®</sup> -CA1 product
	Freshwater-reared salmonids	Control of <b>furunculosis</b> due to <i>Aeromonas salmonicida</i>  Control of <b>coldwater disease</b> due to <i>Flavobacterium psychrophilum</i>	• 10 mg florfenicol/kg fish/d for 10 days	• VFD drug • 12 day withdrawal time

HYDROGEN PEROXIDE				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
35% PEROX-AID <sup>®</sup> Western Chemical, Inc. 1-800-283-5292	Freshwater-reared finfish eggs	Control fungi due to <b>Saprolegniaceae</b>	• Coldwater and cool-water: 500—1,000 mg/L for 15 min in a continuous flow system once per day on consecutive or alternate days until hatch  • Warmwater: 750—1,000 mg/L for 15 min in a continuous flow system once per day on consecutive or alternate days until hatch	• Initial bioassay on a small number of fish is recommended before treating the entire group
	Freshwater-reared salmonids	Control <b>bacterial gill disease</b> due to <i>Flavobacterium branchiophilum</i>	• 100 mg/L for 30 min or 50—100mg/L for 60 min once per day on alternate days for 3 treatments	• Initial bioassay on a small number of fish is recommended before treating the entire group
	Freshwater-reared coolwater finfish and channel catfish	Control <b>external columnaris disease</b> due to <i>Flavobacterium columnare</i>	• Fingerling and adults: 50—75 mg/L for 60 min once per day on alternate days for 3 treatments  • Fry: 50 mg/L for 60 min once per day on alternate days for 3 treatments	• Initial bioassay on a small number of fish is recommended before treating the entire group • Should not be used to treat northern pike or paddlefish (any life-stage) or pallid sturgeon (fry) • Use with caution on walleye

CHORIONIC GONADOTROPIN				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
CHORULON <sup>®</sup> Intervet Inc. 1-800-441-8272	Male and female brood finfish	Aid in improving spawning function	• 50—510 IU/lb males • 67—1,816 IU/lb females	• Intramuscular injection • Up to three doses. Total dosage not to exceed 25,000 IU in fish intended for human consumption • Prescription product restricted to use by or on the order of a licensed veterinarian

FORMALIN				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
PARASITE-S Western Chemical 1-800-283-5292	All finfish	Control <b>external protozoa</b> ( <i>Chilodonella</i> , <i>Costia</i> , <i>Epistylis</i> , <i>Ichthyophthirius</i> , <i>Scyphidia</i> , and <i>Trichodina</i> spp.)	• Salmon & trout in tanks and raceways: • Above 50°F: up to 170 µL/L for up to 1 hr • Below 50°F: up to 250 µL/L for up to 1 hr	• Drug must not be subjected to temperatures below 40°F • Do not apply to ponds when (1) water is warmer than 80°F, (2) there is a heavy phytoplankton blooms, or (3) dissolved oxygen is less than 5 mg/L • Ponds may be retreated in 5 to 10 days if needed • Do not treat ponds containing striped bass • Test on a small number of fish from each lot to check for any unusual sensitivity to formalin before proceeding
FORMALIN-F <sup>™</sup> Natchez Animal Supply Co. 1-800-647-6760		and	Control <b>monogenetic trematodes</b> ( <i>Cleidodiscus</i> , <i>Dactylogyrus</i> , and <i>Gyrodactylus</i> spp.)	• All other finfish up to 250 µL/L for up to 1 hr  • Earthen ponds: 15—25 µL/L indefinitely
FORMACIDE-B B.L. Mitchell, Inc. 1-800-817-5808	All finfish eggs	Control fungi due to <b>Saprolegniaceae</b>	• All finfish eggs: 1,000—2,000 ppm for 15 min  • Acipenseriformes: up to 1,500 ppm for 15 min	• Preliminary bioassay should be conducted on a small number of fish to determine species sensitivity
PARACIDE-F <sup>®</sup> Argent Laboratories 1-800-426-6258	Penaeid shrimp	Control <b>protozoan parasites</b> ( <i>Bodo</i> , <i>Epistylis</i> , and <i>Zoothamnium</i> spp.)	• Tanks and raceways: 50—100 µL/L for up to and 4 hrs daily  • Earthen ponds: 25 µL/L as single treatment	• Drug must not be subjected to temperatures below 40°F • Do not apply to ponds when (1) water is warmer than 80°F, (2) there is a heavy phytoplankton blooms, or (3) dissolved oxygen is less than 5 mg/L • Ponds may be retreated in 5 to 10 days if needed
	Salmon, trout, catfish, largemouth bass, and bluegill	Control <b>external protozoa</b> ( <i>Chilodonella</i> , <i>Costia</i> , <i>Epistylis</i> , <i>Ichthyophthirius</i> , <i>Scyphidia</i> , and <i>Trichodina</i> spp.)	• Salmon & trout in tanks and raceways: • Above 50°F: up to 170 µL/L for up to 1 hr • Below 50°F: up to 250 µL/L for up to 1 hr  • Catfish, largemouth bass, and bluegill: up to 250 µL/L for up to 1 hr  • Earthen ponds: 15—25 µL/L indefinitely	• Drug must not be subjected to temperatures below 40°F • Do not apply to ponds when (1) water is warmer than 80°F, (2) there is a heavy phytoplankton blooms, or (3) dissolved oxygen is less than 5 mg/L • Ponds may be retreated in 5 to 10 days if needed • Do not treat ponds containing striped bass • Test on a small number of fish from each lot to check for any unusual sensitivity to formalin before proceeding
	Salmon, trout, and esocid eggs	Control fungi due to <b>Saprolegniaceae</b>	• 1,000—2,000 ppm for 15 min	• Preliminary bioassay should be conducted on a small number of fish to determine species sensitivity

SULFADIMETHOXINE & ORMETOPRIM				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
ROMET <sup>®</sup> 30 and ROMET <sup>®</sup> TC Aquatic Health Resources 1-877-280-2858	Salmonids	Control <b>furunculosis</b> due to <i>Aeromonas salmonicida</i>	• 50 mg/kg fish/day for 5 days	• In feed • 42 day withdrawal time
	Catfish	Control <b>enteric septicemia</b> due to <i>Edwardsiella ictaluri</i>	• 50 mg/kg fish/day for 5 days	• In feed • 3 day withdrawal time

**NOTE**

- The information provided above is intended as guidance. Always refer to each product's label for specific instructions.
- It is the user's responsibility to read the MSDS for each product and comply with local NPDES requirements.
- Use of product names does not indicate endorsement by the U.S. Fish & Wildlife Service or the American Fisheries Society.
- **Veterinary Feed Directive (VFD) drug (e.g., Aquaflo<sup>®</sup>):** Certain drugs that are intended for use in animal feeds. The use of VFD drugs is permitted only under the professional supervision of a licensed veterinarian. VFD drugs cannot be used under extra-label drug-use provisions.
- **Prescription drugs (e.g., Chorulon<sup>®</sup>):** Drugs that may be used only by, or on the order of, a licensed veterinarian.
- **Extra-Label Use:** The actual or intended use of a FDA-approved drug in a manner that is not in accordance with the approved label directions. Extra-label use is permitted only by, or on the order of, a licensed veterinarian when a valid vet-client-patient relationship exists.
- Please see the FDA/CVM website for additional information: [www.fda.gov/cvm](http://www.fda.gov/cvm)

OXYTETRACYCLINE HYDROCHLORIDE				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
Oxytetracycline HCl Soluble Powder-343 IVX Animal Health 1-800-759-3664	Finfish fry and fingerlings	Mark skeletal tissues	• 200—700 mg oxytetracycline hydrochloride (buffered)/L of water for 2—6 hrs	• None
TERRAMYCIN-343 <sup>®</sup> Aquatic Health Resources 1-877-280-2858				
TETROXY Aquatic Soluble Powder Bimeda 1-888-524-6332				

OXYTETRACYCLINE DIHYDRATE				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
TERRAMYCIN <sup>®</sup> 200 for Fish Phibro Animal Health 1-888-475-7355	Pacific salmon	Mark skeletal tissue	• 250 mg/kg fish/day for 4 days	• Salmon <30 g size • In feed as sole ration • 7 day withdrawal time
	Salmonids	Control of <b>ulcer disease</b> ( <i>Hemophilus piscium</i> ), <b>furunculosis</b> ( <i>Aeromonas salmonicida</i> ), <b>bacterial hemorrhagic septicemia</b> ( <i>A. liquefaciens</i> ), <b>pseudomonas disease</b> ( <i>Pseudomonas</i> ), and <b>coldwater disease</b> ( <i>F. psychrophilum</i> )	• 2.5—3.75 g/100 lbs/day for 10 days	• In mixed ration • 21 day withdrawal time
	All freshwater-reared <i>Oncorhynchus mykiss</i>	Control mortality due to <b>columnaris disease</b> ( <i>F. columnare</i> )	• 2.5—3.75 g/100 lbs/day for 10 days	• In mixed ration • 21 day withdrawal time
	Catfish	Control <b>bacterial hemorrhagic septicemia</b> ( <i>A. liquefaciens</i> ) and <b>pseudomonas disease</b> ( <i>Pseudomonas</i> )	• 2.5—3.75 g/100 lbs/day for 10 days	• In mixed ration • Water temperature not below 62°F (16.7°C) • 21 day withdrawal time
	Lobster	Control <b>gaffkemia</b> ( <i>Aerococcus viridians</i> )	• 1 g/lb medicated feed for 5 days	• In feed as sole ration • 30 day withdrawal time

TRICAINE METHANESULFONATE				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
FINQUEL <sup>®</sup> Argent Laboratories 1-800-426-6258	Fish (Ictaluridae, Salmonidae, Esocidae, and Percidae), aquatic amphibians, and other aquatic poikilotherms	Temporary immobilization	• Fish: 15—330 mg/L • Other poikilotherms: 1:1,000—1:20,000	• Powder is added to water • Concentration depends upon desired degree of anesthesia, species, size, water temperature and softness, and stage of development • Preliminary tests of solution should be made with a few fish • 21 day withdrawal time (fish); laboratory or hatchery use only in other poikilotherms—water temperature over 50°F
TRICAINE-S Western Chemical, Inc. 1-800-283-5292				

