

A QUICK REFERENCE GUIDE TO:



Approved Drugs for Use in Aquaculture



FLORFENICOL				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
AQUAFLO® Intervet/Schering-Plough Animal Health Corp. 1-800-521-5767	Catfish	Control of mortality due to enteric septicemia associated with <i>Edwardsiella ictaluri</i>	• 10 mg florfenicol per kg fish per day for 10 days	• Veterinary Feed Directive (VFD) drug • 12-day withdrawal time
		Control of mortality due to columnaris disease associated with <i>Flavobacterium columnare</i> (Conditional Approval)		
	Freshwater-reared salmonids	Control of mortality due to furunculosis associated with <i>Aeromonas salmonicida</i> Control of mortality due to coldwater disease associated with <i>F. psychrophilum</i>	• 10 mg florfenicol per kg fish per day for 10 days	• VFD drug • 12-day withdrawal time • Must use AQUAFLO®-CA1 product • VFD drug • 15-day withdrawal time

HYDROGEN PEROXIDE				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
35% PEROX-AID® Western Chemical, Inc. 1-800-283-5292	Freshwater-reared finfish eggs	Control of mortality due to saprolegniasis	• Coldwater and cool-water: 500 - 1,000 mg per L for 15 min in a continuous flow system once per day on consecutive or alternate days until hatch • Warmwater: 750 - 1,000 mg per 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 • 0-day withdrawal time
	Freshwater-reared salmonids	Control of mortality due to bacterial gill disease associated with <i>Flavobacterium branchiophilum</i>	• 100 mg per L for 30 min or 50 - 100 mg per 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 • 0-day withdrawal time
	Freshwater-reared coolwater finfish and channel catfish	Control of mortality due to external columnaris disease associated with <i>F. columnare</i>	• Fingerlings and adults: 50 - 75 mg per L for 60 min once per day on alternate days for 3 treatments • Fry: 50 mg per 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 • 0-day withdrawal time

CHORIONIC GONADOTROPIN				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
CHORULON® Intervet Inc. 1-800-441-8272	Male and female brood finfish	Aid in improving spawning function	• 50 - 510 IU per lb males • 67 - 1,816 IU per 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 • 0-day withdrawal time

FORMALIN				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
PARASITE-S Western Chemical, Inc. 1-800-283-5292 FORMALIN-F Natchez Animal Supply Co. 1-800-647-6760 FORMACIDE-B B.L. Mitchell, Inc. 1-800-817-5808	All finfish	Control of external protozoa (species of the genera <i>Chilodonella</i> , <i>Costia</i> , <i>Epistylis</i> , <i>Ichthyophthirius</i> , <i>Scyphidia</i> , and <i>Trichodina</i>) and monogenetic trematodes (species of the genera <i>Cleidodiscus</i> , <i>Dactylogyrus</i> , and <i>Gyrodactylus</i>)	• Salmon & trout in tanks and raceways: • Above 50°F: up to 170 µL per L for up to 1 hr • Below 50°F: up to 250 µL per L for up to 1 hr • All other finfish up to 250 µL per L for up to 1 hr • Earthen ponds: 15 - 25 µL per 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 bloom, or (3) dissolved oxygen is less than 5 mg per 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 • 0-day withdrawal time
	All finfish eggs	Control fungi of the family Saprolegniaceae	• All finfish eggs: 1,000 - 2,000 µL per L for 15 min • Species of the order Acipenseriformes: up to 1,500 µL per L for 15 min	• Preliminary bioassay should be conducted on a small number of fish to determine species sensitivity • 0-day withdrawal time
	Penaeid shrimp	Control protozoan parasites (species of the genera <i>Bodo</i> , <i>Epistylis</i> , and <i>Zoothamnium</i>)	• Tanks and raceways: 50 - 100 µL per L for up to 4 hrs daily • Earthen ponds: 25 µL per 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 bloom, or (3) dissolved oxygen is less than 5 mg per L • Ponds may be retreated in 5 to 10 days if needed • 0-day withdrawal time
PARACIDE-F Argent Laboratories 1-800-426-6258	Salmon, trout, catfish, largemouth bass, and bluegill	Control external protozoa (species of the genera <i>Chilodonella</i> , <i>Costia</i> , <i>Epistylis</i> , <i>Ichthyophthirius</i> , <i>Scyphidia</i> , and <i>Trichodina</i>) and monogenetic trematodes (species of the genera <i>Cleidodiscus</i> , <i>Dactylogyrus</i> , and <i>Gyrodactylus</i>)	• Salmon & trout in tanks and raceways: • Above 50°F: up to 170 µL per L for up to 1 hr • Below 50°F: up to 250 µL per L for up to 1 hr • Catfish, largemouth bass, and bluegill: up to 250 µL per L for up to 1 hr • Earthen ponds: 15 - 25 µL per 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 bloom, or (3) dissolved oxygen is less than 5 mg per 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 • 0-day withdrawal time
	Salmon, trout, and esocid eggs	Control fungi of the family Saprolegniaceae	• 1,000 - 2,000 µL per L for 15 min	• Preliminary bioassay should be conducted on a small number of fish to determine species sensitivity • 0-day withdrawal time

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

- NOTE**

• **Disclaimer:** 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, the U.S. Food & Drug Administration, or the American Fisheries Society.

• **Veterinary Feed Directive (VFD) drug (e.g., Aquaflor®):** 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®):** Drugs that may be used only by, or on the order of, a licensed veterinarian.

• **Extra-Label Use:** The actual or intended use of an 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 veterinarian-client-patient relationship exists.

• **FDA Information:** Please see the FDA/CVM website for additional information and new approvals (<http://www.fda.gov/AnimalVeterinary>). Contact FDA/CVM regarding any adverse drug events, including lack of effectiveness, with any approved drug (1-888-FDA-VETS).

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

OXYTETRACYCLINE DIHYDRATE				
Product name & supplier	Species	Indication	Dosing	Limitations & comments
TERRAMYCIN® 200 for Fish Phibro Animal Health 1-888-475-7355	Pacific salmon	Mark skeletal tissue	• 250 mg per kg fish per day for 4 days	• Salmon <30 g size • In feed as sole ration • 7-day withdrawal time
	Salmonids	Control of ulcer disease (<i>Hemophilus piscium</i>), furunculosis (<i>Aeromonas salmonicida</i>), bacterial hemorrhagic septicemia (<i>A. liquefaciens</i>), and pseudomonas disease (<i>Pseudomonas</i> spp.)	• 2.5 - 3.75 g per 100 lbs fish per day for 10 days	• In mixed ration • 21-day withdrawal time • No temperature restrictions on use
	Freshwater-reared salmonids	Control of mortality due to cold-water disease caused by <i>Flavobacterium psychrophilum</i>	• 3.75 g per 100 lbs fish per day for 10 days	• In mixed ration • 21-day withdrawal time • No temperature restrictions on use
	All freshwater-reared <i>Oncorhynchus mykiss</i>	Control of mortality due to columnaris disease (<i>F. columnare</i>)	• 3.75 g per 100 lbs fish per day for 10 days	• In mixed ration • 21-day withdrawal time • No temperature restrictions on use
	Catfish	Control of bacterial hemorrhagic septicemia (<i>A. liquefaciens</i>) and pseudomonas disease (<i>Pseudomonas</i> spp.)	• 2.5 - 3.75 g per 100 lbs fish per day for 10 days	• In mixed ration • Water temperature not below 62°F (16.7°C) • 21-day withdrawal time
	Lobster	Control of gaffkemia (<i>Aerococcus viridians</i>)	• 1 g per 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 Argent Laboratories 1-800-426-6258 TRICAINE-S Western Chemical, Inc. 1-800-283-5292	Fish (of the families Ictaluridae, Salmonidae, Esocidae and Percidae), aquatic amphibians, and other aquatic poikilotherms	Temporary immobilization	• Fish: 15 - 330 mg per 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

