

**35% PEROX-AID - hydrogen peroxide solution**  
**Western Chemical Inc.**

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**35% PEROX-AID® (35% Hydrogen Peroxide, w/w) EXTERNAL MICROBICIDE FOR CONTROL OF MORTALITY IN FRESHWATER-REARED FINFISH EGGS DUE TO SAPROLEGNIASIS, IN FRESHWATER-REARED SALMONIDS DUE TO BACTERIAL GILL DISEASE, AND IN FRESHWATER-REARED COOLWATER FINFISH AND CHANNEL CATFISH DUE TO EXTERNAL COLUMNARIS DISEASE**

**GENERAL DIRECTIONS FOR USE**

1. Dissolve 35% PEROX-AID® in culture water before addition to the culture unit to achieve required dose based on active ingredient. Consider using aeration to help disperse the chemical and to ensure adequate oxygenation levels.
2. Before treatment, remove dead eggs or finfish and clean rearing units to be treated. The formula to determine the correct volume of 35% PEROX-AID® required for treatment is:

$$\frac{\text{Treatment conc. mg/L (as H}_2\text{O}_2)}{396,100 \text{ mg H}_2\text{O}_2\text{/L 35\% PEROX-AID®}} \times \text{treatment vol (L)} \times 1,000 \text{ mL/L} = \text{mL 35\% PEROX-AID®}$$

**FOR FRESHWATER-REARED FINFISH EGGS**

INDICATIONS: For the control of mortality in freshwater-reared finfish eggs due to saprolegniasis (fungi of the family Saprolegniaceae).

DIRECTIONS FOR USE: Apply 35% PEROX-AID® at a concentration of 500 to 1,000 milligrams hydrogen peroxide per liter of culture water [mg/L; equivalent to parts per million (ppm)] for cold and coolwater freshwater-reared finfish eggs and 750 to 1,000 mg/L for warmwater finfish eggs in continuous flow water supply of finfish egg incubation units for 15 minutes. Treat finfish egg incubation units once per day on consecutive or alternate days until hatch to control mortalities associated with external saprolegniasis in a tiered dosing system as follows:

SPECIES	DOSE (as H <sub>2</sub> O <sub>2</sub> )	DURATION
All cold and coolwater freshwater-reared finfish eggs 1	500-1,000 mg/L	15 minutes
All freshwater-reared warmwater finfish eggs 1	750-1,000 mg/L 15 minutes	15 minutes

1 An initial bioassay on a small number is recommended before treating the entire group.

The amount of 35% PEROX-AID® required for treatment is dependent on the volume of water treated (which equals the water flow rate times 15 min; 10 L/min x 15 min = 150 L).

Example calculation:

$$\frac{500 \text{ mg/L (as H}_2\text{O}_2)}{396,100 \text{ mg H}_2\text{O}_2\text{/L 35\% PEROX-AID®}} \times 150 \text{ L} \times 1,000 \text{ mL/L} = 189 \text{ mL 35\% PEROX-AID®}$$

**LIMITATIONS AND CAUTIONS FOR FINFISH EGG USE**

Some strains of rainbow trout eggs are sensitive to 35% PEROX-AID® treatment at a time during incubation concurrent with blastopore formation through closure, about 70 to 140 Daily Temperature Units, °C. Consider withholding treatment or using alternate therapeutant during that sensitive time period to reduce egg mortalities due to 35% PEROX-AID® toxicity. Although it is unknown whether eggs of other freshwater-reared salmonids or other freshwater-reared finfish other than rainbow trout also have a similar sensitive period, hatchery personnel unfamiliar with the effects of 35% PEROX-

AID® treatments on the species they are culturing should carefully monitor eggs treated with 35% PEROX-AID®.

### **FOR FRESHWATER-REARED SALMONIDS**

**INDICATIONS:** For the control of mortality in freshwater-reared salmonids due to bacterial gill disease associated with *Flavobacterium branchiophilum*.

**DIRECTIONS FOR USE:** Apply 35% PEROX-AID® at a concentration of 100 milligrams hydrogen peroxide per liter of culture water [mg/L; equivalent to parts per million (ppm)] in continuous flow water supply or as a static bath in salmonid culture units for 30 minutes or 50 to 100 mg hydrogen peroxide/L for 60 minutes once per day on alternate days for three treatments in salmonid culture units.

### **FOR FRESHWATER-REARED COOLWATER FINFISH AND CHANNEL CATFISH**

**INDICATIONS:** For the control of mortality in freshwater-reared coolwater finfish and channel catfish due to external columnaris disease associated with *Flavobacterium columnare* (*Flexibacter columnaris*).

**DIRECTIONS FOR USE:** Apply 35% PEROX-AID® at a concentration of 50 to 75 milligrams hydrogen peroxide per liter of culture water [mg/L; equivalent to parts per million (ppm)] in continuous flow water supply or as a static bath in coolwater finfish or channel catfish culture units for 60 minutes once per day on alternate days for three treatments in a tiered dosing system as follows:

SPECIES	DOSE (as H <sub>2</sub> O <sub>2</sub> )	DURATION
Channel catfish and freshwater-reared coolwater finfish fingerling and adults 1,3	50-75 mg/	60 minutes
Channel catfish and freshwater-reared coolwater finfish fry 2,3	50 mg/L	60 minutes

1 Except northern pike

2 Except northern pike or pallid sturgeon

3 An initial bioassay on a small number is recommended before treating the entire group.

Use caution on walleye *Sander vitreus*.

### **LIMITATIONS AND CAUTIONS FOR FINFISH USE**

1. Before conducting treatments with 35% PEROX-AID®, users should test the sensitivity of the finfish species and the life stage to the treatment concentration in a small number before treating the entire group.

2. 35% PEROX-AID® should not be used to treat northern pike *Esox lucius* or paddlefish *Polyodon spathula*.

3. Use with caution on walleye *Sander vitreus*

4. Because finfish sensitivity to 35% PEROX-AID® increases with increasing water temperature, consider administering initial treatments at the lower end of the treatment regimen or reducing water temperature before treatment.

### **LIMITATIONS AND CAUTIONS FOR ALL USES**

1. Prior to the initial use of this drug, you must inform the appropriate National Pollutant Discharge Elimination System (NPDES) permitting authority of your intentions and the information below. A NPDES permit may be required before you can discharge hydrogen peroxide. Effluent discharge limits may also be needed because of its toxicity to aquatic life. Water quality benchmarks have been derived by FDA for use by the NPDES authority. For freshwater aquatic life, the acute benchmark is 0.7 mg/L (equivalent to the Criteria Maximum Concentration or one-half the Final Acute Value). Additional environmental information is available at

<http://www.fda.gov/animalveterinary/developmentapprovalprocess/environmentalassessments/default.htm>.

2. Flow to the culture unit must be sufficient to rapidly flush 35% PEROX-AID® from the culture unit after treatment. Consult with Western Chemical Inc. when treating finfish in recirculating systems for proper procedures regarding flushing characteristics.

3. Avoid feeding finfish immediately before or during exposure.

## **HUMAN WARNING**

### **EMERGENCY FIRST AID:**

- In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Call a physician. Remove and wash contaminated clothing and shoes promptly and thoroughly.

- If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

- If swallowed, do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician.

NOTE TO PHYSICIAN: If swallowed, large quantities of oxygen may be released quickly. The distension of the stomach or esophagus may be injurious. Insertion of a gastric tube may be advisable.

### **INHALATION (Breathing):**

- Avoid breathing vapor or mist; causes irritation of the nose, throat, and lungs; overexposure may be fatal.

### **INGESTION (Swallowing):**

- Do not swallow. This product is harmful if swallowed. Large exposures may be fatal. Can burn mouth, throat and stomach.

### **EYE CONTACT:**

- Do not get in eyes; causes eye burns and possible blindness; effects may be delayed.

### **SKIN CONTACT:**

- Avoid contact with skin; causes skin irritation or burns.

## **HUMAN PRECAUTIONS:**

- Wear chemical safety goggles

- Wear neoprene, butyl or vinyl gloves

- Keep out of reach of children

- Use only in adequate ventilation

- Keep containers tightly closed when not in use

- Wear suitable protective clothing

## **ENVIRONMENTAL PRECAUTIONS:**

- Mixtures with combustible or flammable materials may ignite easily, burn fiercely, or may explode in contaminated closed containers.

- When placed in an unsuitable container, or introduced to other contaminants, elevated temperatures above 38°C (100°F) can increase the decomposition rate of the product.

- In case of fire involving this product, use water only.

- Heat or contamination may cause decomposition and result in dangerous pressure.

- In case of spill or leak, flush away by flooding with water applied quickly to entire spill or leak.

## **STORAGE:**

- Avoid outdoor storage.

- Store in original container in dry location.

- Keep out of sun and away from heat.

- Never use pressure to empty - container is not a pressure vessel.

- Keep open lights, fire and sparks away from container.

- Do not add any other products to this container.

- Never return unused 35% PEROX-AID® to the container - dilute with plenty of water and discard.

- When empty, rinse container thoroughly with clean water before discarding.

NOTICE: Since emptied containers retain product residue, follow label warnings even after container is empty.

Store in a manner designed to prevent spills to surface waters. Implement procedures to properly contain, clean, and dispose of any spilled material.

**DISPOSAL:**

Hydrogen peroxide is a strong oxidizer and a characteristic, hazardous waste as defined by RCRA (40 CFR 261). Contact your State Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance on disposal.

DO NOT flush to sewer unless diluted to 1% or less concentration due to explosion hazard.

Do not contaminate surface water when disposing of equipment washwaters or rinsate.

Empty containers may contain residues and should be washed with water prior to disposal. To report suspected adverse events, for technical assistance or to obtain a copy of the MSDS, contact Western Chemical, Inc. at 1-800-283-5292 or [www.wchemical.com](http://www.wchemical.com).

For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.



**RESIDUE WARNING**

**Withdrawal Time: Zero Days**



**GENERAL DIRECTIONS FOR USE**

1. Dissolve 35% PEROX-AID<sup>®</sup> in culture water before addition to the culture unit to achieve required dose based on active ingredient. Consider using aeration to help disperse the chemical and to ensure adequate oxygenation levels.  
 2. Before treatment, remove dead eggs or finfish and clean rearing units to be treated.  
 The formula to determine the correct volume of 35% PEROX-AID<sup>®</sup> required for treatment is:  
 $\frac{\text{Treatment conc. (mg/L as H}_2\text{O}_2)}{396,100 \text{ mg H}_2\text{O}_2\text{/L 35\% PEROX-AID}^{\text{®}}} \times \text{treatment vol. (L)} \times 1,000 \text{ mL/L} = \text{mL 35\% PEROX-AID}^{\text{®}}$   
**FOR FRESHWATER-REARED FINFISH EGGS**  
**INDICATIONS:** For the control of mortality in freshwater-reared finfish eggs due to saprolegniasis (fungi of the family Saprolegniaceae).  
**DIRECTIONS FOR USE:** Apply 35% PEROX-AID<sup>®</sup> at a concentration of 500 to 1,000 milligrams hydrogen peroxide per liter of culture water (mg/L, equivalent to parts per million (ppm)) for cold and coolwater freshwater-reared finfish eggs and 750 to 1,000 mg/L for warmwater finfish eggs in continuous flow water supply of finfish egg incubation units for 15 minutes. Treat finfish egg incubation units once per day on consecutive or alternate days until hatch to control mortalities associated with external saprolegniasis in a tiered dosing system as follows:

SPECIES	DOSE (as H <sub>2</sub> O <sub>2</sub> )	DURATION
All cold and coolwater freshwater-reared finfish eggs <sup>1</sup>	500-1,000 mg/L	15 minutes
All freshwater-reared warmwater finfish eggs <sup>1</sup>	750-1,000 mg/L	15 minutes

<sup>1</sup> An initial bioassay on a small number is recommended before treating the entire group.  
 The amount of 35% PEROX-AID<sup>®</sup> required for treatment is dependent on the volume of water treated (which equals the water flow rate times 15 min; 10 L/min x 15 min = 150 L).  
 Example calculation:  
 $\frac{500 \text{ mg/L (as H}_2\text{O}_2)}{396,100 \text{ mg H}_2\text{O}_2\text{/L 35\% PEROX-AID}^{\text{®}}} \times 150 \text{ L} \times 1,000 \text{ mL/L} = 189 \text{ mL 35\% PEROX-AID}^{\text{®}}$   
**LIMITATIONS AND CAUTIONS FOR FINFISH EGG USE**

Some strains of rainbow trout eggs are sensitive to 35% PEROX-AID<sup>®</sup> treatment at a time during incubation concurrent with blastopore formation through closure, about 70 to 140 Daily Temperature Units, °C. Consider withholding treatment or using alternate therapeutant during that sensitive time period to reduce egg mortalities due to 35% PEROX-AID<sup>®</sup> toxicity. Although it is unknown whether eggs of other freshwater-reared salmonids or other freshwater-reared finfish other than rainbow trout also have a similar sensitive period, hatchery personnel unfamiliar with the effects of 35% PEROX-AID<sup>®</sup> treatments on the species they are culturing should carefully monitor eggs treated with 35% PEROX-AID<sup>®</sup>.

**FOR FRESHWATER-REARED SALMONIDS**  
**INDICATIONS:** For the control of mortality in freshwater-reared salmonids due to bacterial gill disease associated with *Flavobacterium branchiophilum*.  
**DIRECTIONS FOR USE:** Apply 35% PEROX-AID<sup>®</sup> at a concentration of 100 milligrams hydrogen peroxide per liter of culture water (mg/L, equivalent to parts per million (ppm)) in continuous flow water supply or as a static bath in salmonid culture units for 30 minutes or 50 to 100 mg hydrogen peroxide/L for 60 minutes once per day on alternate days for three treatments in a tiered dosing system as follows.

**FOR FRESHWATER-REARED COOLWATER FINFISH AND CHANNEL CATFISH**

**INDICATIONS:** For the control of mortality in freshwater-reared coolwater finfish and channel catfish due to external columnaris disease associated with *Flavobacterium columnare* (*Flavobacter columnaris*).  
**DIRECTIONS FOR USE:** Apply 35% PEROX-AID<sup>®</sup> at a concentration of 50 to 75 milligrams hydrogen peroxide per liter of culture water (mg/L, equivalent to parts per million (ppm)) in continuous flow water supply or as a static bath in coolwater finfish or channel catfish culture units for 60 minutes once per day on alternate days for three treatments in a tiered dosing system as follows.

SPECIES	DOSE (as H <sub>2</sub> O <sub>2</sub> )	DURATION
Channel catfish and freshwater-reared coolwater finfish fingerling and adults <sup>1,2</sup>	50-75 mg/L	60 minutes
Channel catfish and freshwater-reared coolwater finfish fry <sup>1,3</sup>	50 mg/L	60 minutes

<sup>1</sup> Except northern pike  
<sup>2</sup> Except northern pike or pallid sturgeon  
<sup>3</sup> An initial bioassay on a small number is recommended before treating the entire group. Use caution on walleye *Sander vitreus*.  
**LIMITATIONS AND CAUTIONS FOR FINFISH USE**  
 1. Before conducting treatments with 35% PEROX-AID<sup>®</sup>, users should test the sensitivity of the finfish species and the life stage to the treatment concentration in a small number before treating the entire group.  
 2. 35% PEROX-AID<sup>®</sup> should not be used to treat northern pike *Esox lucius* or paddlefish *Polyodon spathula*.  
 3. Use with caution on walleye *Sander vitreus*.  
 4. Because finfish sensitivity to 35% PEROX-AID<sup>®</sup> increases with increasing water temperature, consider administering initial treatments at the lower end of the treatment regimen or reducing water temperature before treatment.

**LIMITATIONS AND CAUTIONS FOR ALL USES**  
 1. Prior to the initial use of this drug, you must inform the appropriate National Pollutant Discharge Elimination System (NPDES) permitting authority of your intentions and the information below. A NPDES permit may be required before you can discharge hydrogen peroxide. Effluent discharge limits may also be needed because of its toxicity to aquatic life. Water quality benchmarks have been derived by FDA for use by the NPDES authority. For freshwater aquatic life, the acute benchmark is 0.7 mg/L (equivalent to the Criteria Maximum Concentration or one-half the Final Acute Value). Additional environmental information is available at <http://www.fda.gov/animalveterinary/development/ovalprocess/environmentalassessments/default.htm>.  
 2. Flow to the culture unit must be sufficient to rapidly flush 35% PEROX-AID<sup>®</sup> from the culture unit after treatment. Consult with Western Chemical Inc. when treating finfish in recirculating systems for proper procedures regarding flushing characteristics.  
 3. Avoid feeding finfish immediately before or during exposure.

# 35% PEROX-AID<sup>®</sup>

## (35% Hydrogen Peroxide, w/w)

EXTERNAL MICROBICIDE FOR CONTROL OF MORTALITY IN FRESHWATER-REARED FINFISH EGGS DUE TO SAPROLEGNIASIS, IN FRESHWATER-REARED SALMONIDS DUE TO BACTERIAL GILL DISEASE, AND IN FRESHWATER-REARED COOLWATER FINFISH AND CHANNEL CATFISH DUE TO EXTERNAL COLUMNARIS DISEASE

READ ENTIRE PACKAGE INSERT BEFORE USING THIS PRODUCT  
 KEEP OUT OF THE REACH OF CHILDREN  
 DO NOT USE IN EARTHEN PONDS WITH NO WATER EXCHANGE

**ACTIVE DRUG INGREDIENT**  
 Hydrogen Peroxide

**GUARANTEED ANALYSIS**

Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> )	35% (W/W)
Water and inert ingredients	65% (W/W)

Net Contents: 55 Gallons (208 Liters)



MANUFACTURED FOR:  
 WESTERN CHEMICAL INC.  
 FERNDALE, WA 98248  
 ver. 020513

NADA 141-255, Approved by FDA

Lot # \_\_\_\_\_

Exp. \_\_\_\_\_

For Chemical Emergency Spill, Leak, Fire, Exposure or Accident  
 CALL CHEMTREC, DAY OR NIGHT: 1-800-424-9300

UN2014,  
 HYDROGEN PEROXIDE 35%, Aqueous Solutions,  
 5.1, (8), PGII, ERG# 140

**HUMAN WARNING**  
**EMERGENCY FIRST AID:**  
 • In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Call a physician. Remove and wash contaminated clothing and shoes promptly and thoroughly.  
 • If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.  
 • If swallowed, do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician.  
**NOTE TO PHYSICIAN:** If swallowed, large quantities of oxygen may be released quickly. The distension of the stomach or esophagus may be injurious. Insertion of a gastric tube may be advisable.  
**INHALATION (Breathing):**  
 • Avoid breathing vapor or mist; causes irritation of the nose, throat, and lungs; overexposure may be fatal.  
**INGESTION (Swallowing):**  
 • Do not swallow. This product is harmful if swallowed. Large exposures may be fatal. Can burn mouth, throat and stomach.  
**EYE CONTACT:**  
 • Do not get in eyes; causes eye burns and possible blindness; effects may be delayed.  
**SKIN CONTACT:**  
 • Avoid contact with skin; causes skin irritation or burns.  
**HUMAN PRECAUTIONS:**  
 • Wear chemical safety goggles  
 • Wear neoprene, butyl or vinyl gloves  
 • Keep out of reach of children  
 • Use only in adequate ventilation  
 • Keep containers tightly closed when not in use  
 • Wear suitable protective clothing  
**ENVIRONMENTAL PRECAUTIONS:**  
 • Mixtures with combustible or flammable materials may ignite easily, burn fiercely, or may explode in contaminated closed containers.  
 • When placed in an unsuitable container, or introduced to other contaminants, elevated temperatures above 38°C (100°F) can increase the decomposition rate of the product.  
 • In case of fire involving this product, use water only.  
 • Heat or contamination may cause decomposition and result in dangerous pressure.  
 • In case of spill or leak, flush away by flooding with water applied quickly to entire spill or leak.  
**STORAGE:**  
 • Avoid outdoor storage.  
 • Store in original container in dry location.  
 • Keep out of sun and away from heat.  
 • Never use pressure to empty - container is not a pressure vessel.  
 • Keep open lights, fire and sparks away from container.  
 • Do not add any other products to this container.  
 • Never return unused 35% PEROX-AID<sup>®</sup> to the container - dilute with plenty of water and discard.  
 • When empty, rinse container thoroughly with clean water before discarding.  
**NOTICE:** Since emptied containers retain product residue, follow label warnings even after container is empty.  
 Store in a manner designed to prevent spills to surface waters. Implement procedures to properly contain, clean, and dispose of any spilled material.  
**DISPOSAL:**  
 Hydrogen peroxide is a strong oxidizer and a characteristic, hazardous waste as defined by RCRA (40 CFR 261). Contact your State Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance on disposal. DO NOT flush to sewer unless diluted to 1% or less concentration due to explosion hazard. Do not contaminate surface water when disposing of equipment washwaters or rinsate. Empty containers may contain residues and should be washed with water prior to disposal. To report suspected adverse events, for technical assistance or to obtain a copy of the MSDS, contact Western Chemical, Inc. at 1-800-283-5292 or [www.wchemical.com](http://www.wchemical.com). For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.

**RESIDUE WARNING**  
 Withdrawal Time: Zero Days

# 35% PEROX-AID

## hydrogen peroxide solution

Product Information			
Product Type	OTC ANIMAL DRUG	Item Code (Source)	NDC:50 378-014
Route of Administration	TOPICAL		

Active Ingredient/Active Moiety			
Ingredient Name	Basis of Strength	Strength	
HYDROGEN PEROXIDE (UNII: BBX060AN9V) (HYDROGEN PEROXIDE - UNII:BBX060AN9V)	HYDROGEN PEROXIDE	350 g in 1 L	

Inactive Ingredients	
Ingredient Name	Strength
Water (UNII: 059QF0KO0R)	

Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:50 378-014-01	208 L in 1 DRUM		
2	NDC:50 378-014-10	19 L in 1 CONTAINER		

3	NDC:50378-014-99	1200 L in 1 CONTAINER		
<b>Marketing Information</b>				
<b>Marketing Category</b>	<b>Application Number or Monograph Citation</b>	<b>Marketing Start Date</b>	<b>Marketing End Date</b>	
NADA	NADA141255	01/11/2007		

**Labeler** - Western Chemical Inc. (085803500)

**Registrant** - Western Chemical Inc. (085803500)

**Establishment**

<b>Name</b>	<b>Address</b>	<b>ID/FEI</b>	<b>Business Operations</b>
Western Chemical Inc.		085803500	analysis, label

Revised: 2/2014

Western Chemical Inc.