

1. Chemical Product and Company Identification

Eka Chemicals Inc.

1775 West Oak Commons Court
Marietta, GA 30062
USA

24 Hour Emergency Number
US CHEMTREC 1-800-424-9300
CANADA CANUTEC 1-613-966-6666

Product Name

35% PEROX-AID®

Chemical Name

Inorganic Peroxide, Oxidizer

CAS

Not Applicable

Synonym(s)

Hydrogen Peroxide 35% by Wt. In aqueous solution.

Chemical Type

Inorganic Peroxide, Oxidizer. CAS Number 7722-84-1.

Intended Use

External microbiocide 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.

2 Hazards Identification

Emergency Overview

35% PEROX-AID® is a clear colorless liquid with a slightly pungent odor, containing the active ingredient hydrogen peroxide. Harmful if swallowed. Oxidizer: accelerates combustion of organic materials (wood, paper, oil, clothing). Elevated temperatures above 38 C (100F) can increase the decomposition rate of the product. Material will decompose when exposed to heat, metals, alkalis, reducing agents or other impurities and generate oxygen gas, steam, and heat.

Routes of Exposure

Skin and eye contact, ingestion and inhalation

Potential Health Effects

Ingestion

This product is harmful if swallowed. Large exposure may be fatal. Can burn mouth, throat and stomach. Oxygen gas in the esophagus and stomach causes extreme swelling leading to severe injuries.

Skin

Prolonged exposure may cause skin irritation. Prolonged exposure may cause skin irritation or burns.

Eyes

Irritating and may injure eye tissue causing corneal damage and possible blindness.

Inhalation

Irritating to nose, throat, and respiratory tract. Severe overexposure may be fatal.

Target organs

Overexposure may cause lung damage, eye damage and skin damage.

Chronic Effects

Not listed as a possible carcinogenic by OSHA, IARC or NTP. Mutagenic for bacteria and yeast. No studies were found on the possible teratogenic effects of hydrogen peroxide in humans or experimental animals. No studies were found on the possible developmental or reproductive effects of hydrogen peroxide in humans or experimental animals.

3. Composition / Information on Ingredients

Component

Water

CAS

7732-18-5

% Wt/Wt

< 65 %

Hydrogen peroxide

7722-84-1

< 35 %

ACGIH - Threshold Limits Values - Time Weighted
Averages (TLV-TWA)

1 ppm TWA

This MSDS is not intended for use outside of North America

4. First Aid Measures

First Aid

<i>Ingestion</i>	DO NOT induce vomiting. Examine lips and mouth to determine whether the tissues are damaged which may indicate ingestion. (Absence of such signs is not conclusive.) Loosen tight clothing. If victim is not breathing, give artificial respiration. If victim is conscious, give plenty of water to dilute stomach contents. Seek immediate medical attention.
<i>Skin</i>	Wash with soap and water. Immediately take off all contaminated clothing. Rinse again. Do not allow contaminated clothing to dry before washing clothing on site. Seek medical attention if skin is burned or if symptoms continue.
<i>Eyes</i>	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Seek medical attention. Eye effects may be delayed for as long as a week or more after exposure.
<i>Inhalation</i>	Remove victim to fresh air. If breathing stops, administer artificial respiration. If breathing is difficult, administer oxygen. Seek medical attention. Effects (lung edema) may be delayed for a few hours and aggravated by physical effort.
<i>Notes to Physician</i>	Risk of permanent corneal injury and possible blindness if splashed into eyes.

5. Fire Fighting Measures

<i>Flammable Properties</i>	This product is not combustible, but is a strong oxidizer. Mixtures with combustible or flammable materials may ignite easily, burn fiercely, or may explode in contaminated, closed containers. Residual hydrogen peroxide that is allowed to dry, (upon evaporation hydrogen peroxide can concentrate), on organic materials such as paper, fabrics, cotton leather, wood or other combustibles can cause the materials to ignite and result in a fire.
Extinguishing Media	
<i>Suitable Extinguishing Media</i>	Small Fires: USE WATER ONLY. Use large amounts of water and spray to cool containers. Evacuate enclosed and surrounding areas. Large Fires: USE WATER ONLY. Evacuate enclosed and surrounding areas immediately. FOR LARGE FIRES: Wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH approved and full protective gear. DO NOT move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can without risk. ALWAYS STAY AWAY from the ends of tanks. Flood fire area with water from a distance. Cool containers with flooding quantities of water until well after the fire is out. For massive fires, fight fire from maximum distance or use unmanned hose holders or monitor nozzles. If this is not possible, withdraw from the area and let burn.
<i>Unsuitable Extinguishing Media</i>	Do not use dry chemicals, CO ₂ , Halon, foam or fire blanket.
Protection of Fire Fighters	
<i>Protective Equipment for Fire Fighters</i>	Self-contained breathing apparatus/full protective clothes should be worn in fire conditions.
<i>Specific Hazards Arising From the Chemical</i>	Oxidizer - Keep away from flammable and combustible materials. Residual hydrogen peroxide that is allowed to dry on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire. Runoff may create a fire or explosive hazard. DO NOT flush to sewer unless diluted to 1% or less concentration due to explosion hazard. May cause environmental damage. Hydrogen peroxide decomposes on heating to produce oxygen gas, steam and heat.

6. Accidental Release Measures

<i>Personal Precautions</i>	In case of large spills, follow all facility emergency response procedures.
<i>Environmental Precautions</i>	SMALL SPILL: Do not use absorbents. Contain spill using noncombustible material such as vermiculite, sand or earth. If material is spilled on wooden floor or other combustible material, flush with large quantity of water. If material is spilled on noncombustible floor or ground, allow material to decompose.
<i>Methods for Containment</i>	LARGE SPILL: Contain spill using noncombustible material such as vermiculite, sand or earth. DO NOT use combustible absorbents. Avoid contact with combustible materials such as wood, paper, oil or clothing. Dike far ahead of solution for later disposal. If inside: Evacuate enclosed and surrounding areas immediately. Contact local fire department and notify proper authorities.

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Contact Eka Chemicals for recommendations. NOTICE: Residual hydrogen peroxide that is allowed to dry, (upon evaporation hydrogen peroxide can concentrate), on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

7. Handling and Storage

Handling Procedures

Use only inert lubricants and packings for pumps, valves and other equipment. Exchange lubricants at regular intervals. Avoid contact with incompatibles. Keep container closed when not in use. Avoid contact with skin and eyes. Keep away from sources of heat and ignition. DO NOT use pressure to empty container. DO NOT return unused product to the container. Observe all warnings and precautions listed for this product.

Storage Procedures

Store in original vented containers or in dedicated bulk storage facilities. Keep away from sun and heat. Store in a cool, dry, and fireproof area away from heat sources including friction and impact. Drums: DO NOT stack drums. DO NOT store on wooden pallets. Store on concrete. Bulk: Store in properly designed tank such as stainless steel or aluminum with containment dike. Contact Eka Chemicals for recommendations. Store separate from all other materials. DO NOT confine in unvented vessels or between closed valves. Containers of this material retain product residues. Incompatible Materials: High pH materials, metals, salts, organics, reducing agents, dust and dirt.

8. Exposure Controls / Personal Protection

Exposure Guidelines

OSHA PEL: 1 ppm (1.4 mg/m³) TWA ACGIH TLV: 1 ppm TWA NIOSH IDLH: 75 ppm

Engineering Controls

Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment

Eyes/Face

Wear safety glasses with side shields, or chemical goggles plus a face shield.

Skin

Wear protective gloves, neoprene, butyl rubber or vinyl. Wear plastic or rubber safety toed boots. Wash exposed skin with soap and water. When contact is likely, wear PVC or rubber rainsuit and wash down rainsuit after each use. For general use, clothing of poly/cotton blend may be worn. Change clothing when contaminated and wash on-site. Do not allow contaminated clothing to dry before washing clothing on-site.

Respiratory

In the case of insufficient ventilation wear suitable respirator (NIOSH/MSHA approved).

9. Physical & Chemical Properties

Appearance

Form	Liquid
Color	Colorless
Odor	Slightly pungent
Odour Threshold	Not Available
Physical State	liquid
pH	< 2
Melting Point	(Liquid)
Freezing Point	-27.4 °F (-33 °C) (-27F)
Boiling Point	226.4 °F (108 °C) (226F)
Flash Point	Not flammable
Evaporation Rate	> 1 (Butyl acetate = 1)
Flammability	Not Available
Upper/Lower Flammability	Not flammable
Vapor Pressure	23 mmHg @ 86 F (H ₂ O ₂ and H ₂ O)
Vapor Density	0.66 - 0.95 Air = 1.0

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13. Disposal Considerations

Disposal Instructions

Hydrogen peroxide is a characteristic hazardous waste as defined by RCRA: 40CFR261. EPA Hazardous Waste Number: D001 (ignitable waste) State/Provincial and local regulations are complex and may differ from Federal regulations. Contact a hazardous waste disposal firm for disposal advice. Empty containers may contain residues and should be washed with water prior to disposal. May create a fire or explosion hazard. Material will decompose when exposed to heat, metals, alkalis, reducing agents or other impurities and generate oxygen gas, steam, and heat. May cause environmental damage.

14. Transport information

Goods Description

Proper Shipping Name: Hydrogen Peroxide, aqueous solution [with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)], or Hydrogen Peroxide, aqueous solution [with not less than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary)].

General

Label Codes: 5.1 (Oxidizer), 8 (Corrosive).

Transport Summary

Eka Chemicals does not recommend shipping hydrogen peroxide by air.

15. Regulatory Information

US Federal Regulations

35% PEROX-AID® is the only hydrogen peroxide product approved for use in aquaculture (NADA # 141-255). This product is listed on the U.S. EPA TSCA Inventory. OSHA HCS: Subject to OSHA Hazard Communication Standard. CAA RMP: Not subject to CAA RMP. OSHA PSM: Greater than 52% concentration is subject to OSHA PSM. TQ 7500 lbs.

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

Hydrogen peroxide 7722-84-1 1000 lb TPQ (concentration >52%)

OSHA Regulated

Regulated under 29 CFR 1910.1200. Not subject to OSHA PSM. Consult Federal, State/Provincial, and local regulations for changes and applicability to your materials.

SARA 302

Not subject to SARA Section 302.

SARA 311/312

TQ for reporting: 10,000 pounds hydrogen peroxide

SARA 313

Not subject to SARA Section 313.

Canada DSL

Listed

WHMIS Classification

C, DB2 - Poisonous and infectious material - Other effects - Toxic

General

Not subject to CERCLA. (An unlisted characteristic D001 waste is reportable under CERCLA. The RQ is 100 pounds for a D001 waste.) 40CFR302.4

16. Other Information

HMIS RATINGS

Health 2
Flammability Classification 0
Reactivity 1
Pers. Prot X

NFPA RATINGS

Health 2
Flammability Classification 0
Reactivity 1
Special Hazards OXY

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Other Information

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MSDS Sections Updated

Chemical Product and Company Identification: Product Synonyms

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