



Pure Perox **Product Name:** Date: 3/2/2021

SECTION 1 **IDENTIFICATION** 

Supplier: Phoenix Products Company

**Distributor: Oxygen Pools** 55 Container Drive 601 North Congress Ave

Terryville, CT 06786 Suite 311

(860) 589-7502 Delray Beach, FL 33445

**U.S. PERS Emergency Telephone:** 1-800-633-8253 **Product Name: Pure Perox** 

Synonyms: Hydrogen Peroxide Solution Albone, Hydrogen Dioxide, Perhydrol,

Superoxol, Perone

**Chemical Name:** Hydrogen Peroxide

Chemical Formula:  $H_2O_2$ **CAS Number:** 7722-84-1

#### SECTION 2 **HAZARDOUS COMPONENTS**

## **Emergency Overview Danger** Corrosive







## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H271: Oxidizing liquids (Category 1)

H302: Acute toxicity, Oral (Category 4)

H314: Skin corrosion (Category 1A)

H318: Serious eye damage (Category 1) H402: Acute aquatic toxicity (Category 3)

H412: Chronic aquatic toxicity (Category 3)

## **Hazard Statement(s)**

H271: May cause fire or explosion; strong oxidizer

H302: Harmful if swallowed

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

H402: Harmful to aquatic life

H412: Harmful to aquatic life with long-lasting effects

## Precautionary statement(s)

P210: Keep away from heat.

P220: Keep/Store away from clothing/ combustible materials.

P221: Take any precaution to avoid mixing with combustibles.

P273: Avoid release to the environment.

P264: Wash skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P283: Wear fire/ flame resistant/ retardant clothing.



#### SECTION 2 HAZARDOUS COMPONENTS - Continued

P301+ P312: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P301+ P330+ P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+ P361+ P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P306+360: IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

P310: Immediately call a POISON CENTER or doctor/ physician.

P363: Wash contaminated clothing before reuse.

P370+378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P371+380+375: In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

P405: Store locked up.

P501: Dispose of contents/ container to an approved waste disposal plant.

**Chronic Health Effects:** Principal routes of exposure are usually by skin contact/eye contact with the material and inhalation of vapor. Severe systematic poisoning can cause tremors and numbness of the extremities, shock, convulsions and unconsciousness.

# SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

ComponentCAS NumberPercentHydrogen Peroxide7722-84-130%

#### SECTION 4 FIRST AID MEASURES

**General Advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin Contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with plenty of water. Consult a physician.

Notes to Physician: Treat Symptomatically.





## SECTION 5 FIRE FIGHTING MEASURES

**Extinguishing Media:** Flooding quantities of water only in the early stages of a fire. Water spray or fog. DO NOT use halogenated fire extinguishing agents

Firefighting: Alert Emergency Responders and tell them location and nature of hazard.

- -May be violently or explosively reactive.
- -Wear full body protective clothing with breathing apparatus.
- -Prevent, by any means available, spillage from entering drains or water courses.

Use firefighting procedures suitable for surrounding area. Cool fire exposed containers with water spray from a protected location. DO NOT approach containers suspected to be hot. If safe to do so, remove containers from path of fire. When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 800 metres in all directions.

**General Fire Hazards/Hazardous Combustible Products:** Non combustible liquid. Will not burn but increases intensity of fire. Contact with readily oxidizable organic material may cause ignition /fire. Heating may cause expansion or decomposition leading to violent rupture of containers.

**Fire Incompatibility:** Avoid contact with organic materials / compounds, particularly finely divided combustible materials as ignition may result. Violent catalytic decomposition will occur in contact with certain metals such as iron, copper, chromium, brass, bronze, lead, silver, manganese or their salts.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Minor Spills:** Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety glasses. Remove all ignition sources. Small quantities may be discharged to sewer with a large excess of water. Wipe up.

## **Major Spills**

**Personal precautions, protective equipment and emergency procedures:** Clear area of personnel and move upwind. Alert Emergency Responders and tell them location and nature of hazard. May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. No smoking, naked lights or ignition sources. Increase ventilation.

**Environmental Precautions:** Prevent, by any means available, spillage from entering drains or water and water courses. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. If contamination of drains or waterways occurs, advise emergency services.

**Methods and materials for containment and cleaning up:** Collect recoverable product into labeled containers for recycling. DO NOT return unused product to containers. Absorb remaining product with sand, earth or vermiculite. Collect residues and place in labeled plastic containers with vented lids. Wash spill area with large quantities of water. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

## SECTION 7 HANDLING AND STORAGE

**Procedure For Handling:** Avoid generating and breathing mist. Handle and open container with care. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. Use good occupational work practice. Observe manufacturer's storing and handling recommendations. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Avoid smoking, naked lights, heat or ignition sources. Use in a well-ventilated area. Avoid contact with incompatible materials. DO NOT return unused product to containers. Avoid sources of heat. Mild steel, brass, bronze and copper equipment should not be used. When handling, DO NOT eat, drink or smoke. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before reuse.



## SECTION 7 HANDLING AND STORAGE - Continued

**Recommended Storage Methods:** Polyethylene or polypropylene container. Packing as recommended by manufacturer. Container to have vented cap. Properly passivated aluminium or stainless steel containers. Porcelain, vitreous stoneware.

**Storage Requirements:** Keep cool. Store below 25°C. Observe manufacturer's storing and handling recommendations. Store in original containers and Store under cover. No smoking, naked lights, heat or ignition sources. Store in a cool, dry and well-ventilated area. Store in a cool area and away from sunlight. Store away from incompatible materials. DO NOT use mild steel or galvanised containers. Store in an upright position Protect containers against physical damage. Check regularly for spills and leaks.

# SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION

#### **Control Parameters**

Components with workplace control parameters

Component	CAS-No.	Value	Control Parameters	Basis	
Hydrogen peroxide	7722-84-1	TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)	
	Remarks	Eye, skin, & Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.			
		TWA	1 ppm 1.4 mg/m3	USA. NIOSH Recommended Exposure Limits	
		TWA	1 ppm 1.4 mg/m3	USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants	
		The value in mg/m3 is approximate.			
		TWA	1ppm 1.4 mg/m3	USA. OSHA – TABLE Z-1 Limits for Air Contaminants – 1910.1000	

## **Exposure Controls**

**Appropriate Engineering Controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## **Personal Protective Equipment**

**Eye/Face Protection:** Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection:** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of Environmental Exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.





#### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid Odor: Slightly Pungent **Odor Threshold:** no data available

pH (1% solution): 5.0-6.0 Melting Range(°F): 59-91 Initial Boiling Point and Boiling Range (°F): 217-226 Flash Point: not applicable **Evaporation Rate:** >1 BuAc=1 Flammability (solid, gas): no data available **Upper/Lower Flammability or Explosive Limits:** 

Vapor Pressure (mmHq): 22.952

Vapor Density: no data available

Specific Gravity (water = 1): 1.07-1.13 **Relative Density:** 1.110 g/cm3 Water Solubility (g/L): Miscible

Partition coefficient (n-octanol/water): no data available **Auto-ignition Temperature:** no data available no data available **Decomposition Temperature: Viscosity:** no data available **Explosive Properties:** no data available

Volatile Component (%vol): 100

**Oxidizing Properties:** no data available

#### SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Stable under recommended storage condition.

Conditions Contributing To Instability: Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous. Presence of heat source and direct sunlight. Solutions of hydrogen peroxide decompose slowly releasing oxygen. Heat or contaminants will accelerate decomposition. Containers may be pressurized. Hydrogen peroxide is decomposed by alkalis and even ordinary dust or rust.

no data available

Storage Incompatibility: Rotate all stock to prevent ageing. Use on FIFO (First In-First Out) basis. Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous. Segregate from combustible materials, particularly finely divided combustible materials and reducing agents.

Incompatible Materials: Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

#### SECTION 11 TOXICOLOGICAL INFORMATION

**Toxicity:** 4060 mg/kg Dermal (rabbit) LD50:

Dermal (rabbit) LDLo: 500 mg/kg Inhalation (mouse) LC50: 2000 mg/kg/4h



## SECTION 11 TOXICOLOGICAL INFORMATION - Continued

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production.

## Carcinogenicity

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrogen peroxide)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: Not Available

**Specific target organ toxicity - single exposure:** Not Available **Specific target organ toxicity - repeated exposure:** Not Available

Aspiration Hazard: Not Available

## SECTION 12 **ECOLOGICAL INFORMATION**

Toxicity: Not Available

Persistence and Degradability: Not Available Bioaccumulative Potential: Not Available

Mobility in Soil: Not Available

**Results of PBT and vPvB Assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

**Other Adverse Effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

### SECTION 13 **DISPOSAL CONSIDERATIONS**

### **Waste Treatment Methods**

Empty container retains product residue. Observe all label precautions. Do not distribute, make available, furnish or reuse empty container. Triple rinse empty container and add rinse water to pool. Dispose of container with normal trash.





## SECTION 14 TRANSPORT INFORMATION





DOT: UN Number: 2014

**UN Proper Shipping Name:** Hydrogen peroxide, aqueous solutions

Transport Hazard Class: 5.1 (8)
Packing Group:

TDG: UN Number: 2014

**UN Proper Shipping Name:** Hydrogen peroxide, aqueous solutions

**Transport Hazard Class:** 5.1 (8) **Packing Group:** II No

IMDG: UN Number: 2014

**UN Proper Shipping Name:** Hydrogen peroxide, aqueous solutions

Transport Hazard Class: 5.1 (8)
Packing Group: II
EMS-No: F-H, S-Q

Marine Pollutant: No

IATA: UN Number: 2014

**UN Proper Shipping Name:** Hydrogen peroxide, aqueous solutions

Transport Hazard Class: 5.1 (8) Packing Group:

# SECTION 15 REGULATORY INFORMATION

**SARA 302 Components:** The following components are subject to reporting levels established by SARA Title III, Section 302:

CAS-No.

Revision Date
1993-04-24

**SARA 313 Components:** SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components:CAS-No.Revision DateHydrogen peroxide7722-84-11993-04-24

Pennsylvania Right To Know Components:CAS-No.Revision DateHydrogen peroxide7722-84-11993-04-24

New Jersey Right To Know Components:CAS-No.Revision DateHydrogen peroxide7722-84-11993-04-24

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.



# SECTION 16 OTHER INFORMATION

HMIS Rating		
Health Hazard	3	
Chronic Health Hazard	*	
Flammability		
Physical Hazard		

NFPA Rating	
Health Hazard	3
Fire Hazard	0
Reactivity Hazard	2
Special hazard.l	OX

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Date: 3/2/2021 Phoenix Products Company