

MSDS**Material Safety Data Sheet**24 hour Emergency Telephone:
Chemtrec: 1-800-424-9300

Outside U.S. and Canada Chemtrec: 202-483-7616

From: Vinqury, Inc.
7795 Bell Road
Windsor, CA 95492**VINQUIRY****NOTE:** CHEMTREC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All Non-emergency questions should be directed to Customer Service (1-707-838-6312) for assistance.

Hydrogen Peroxide, 30%**HYDROGEN PEROXIDE 30% SOLUTION**MSDS Number: HP124 --- *Effective Date: 01/01/04***1. Product Identification****Synonyms:** Peroxide; Hydrogen Dioxide**CAS No.:** 7722-84-1**Molecular Weight:** 34.01**Chemical Formula:** H₂O₂**Vinqury, Inc. Product Codes:** 10-124-0000, 10-124-0030, 10-124-0060, 10-124-0118, 10-124-0237, 10-124-0473**2. Composition/Information on Ingredients**

| Ingredient | CAS No | Percent | Hazardous |
|-------------------|-----------|---------|-----------|
| Hydrogen Peroxide | 7722-84-1 | 30% | Yes |
| Water | 7732-18-5 | 70% | No |

Hazard Symbols: O C**Risk Phrases:** 34 8**3. Hazards Identification****Emergency Overview****Danger!** Strong oxidizer. Contact with other material may cause a fire. Eye contact may result in permanent eye damage. May cause central nervous system effects. Causes eye and skin irritation and possible burns. Corrosive. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. Light sensitive. May be harmful if swallowed. May cause blood abnormalities.

Target Organs: Blood, central nervous system.

Potential Health Effects

Eye:

Contact with liquid is corrosive to the eyes and causes severe burns. Contact with the eyes may cause corneal damage.

Skin:

Causes severe skin irritation and possible burns. May cause discoloration, erythema (redness), swelling, and the formation of papules and vesicles (blisters).

Ingestion:

Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Causes gastrointestinal tract burns. May cause vascular collapse and damage. May cause damage to the red blood cells. May cause difficulty in swallowing, stomach distension, possible cerebral swelling and death. Ingestion may result in irritation of the esophagus, bleeding of the stomach and ulcer formation.

Inhalation:

Causes chemical burns to the respiratory tract. May cause ulceration of nasal tissue, insomnia, nervous tremors with numb extremities, chemical pneumonia, unconsciousness, and death. At high concentrations, respiratory effects may include acute lung damage and delayed pulmonary edema.

Chronic:

Prolonged or repeated skin contact may cause dermatitis. Laboratory experiments have resulted in mutagenic effects. Repeated contact may cause corneal damage.

VINQUIRY INC. SAFETY DATA Ratings (Provided here for your convenience)

Health Rating: 2 – Moderate

Flammability Rating: 0 – None

Reactivity Rating: 3 – Severe (Oxidizer)

Contact Rating: 4 – Extreme (Corrosive)

Lab Protective Equipment: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES

Storage Color Code: Yellow (Reactive)

4. First Aid Measures

Eyes: Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin: Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. Wash mouth out with water. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively. Attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided. In the event of severe distension of the stomach or esophagus due to gas formation, insertion of a gastric tube may be required. To treat corneal damage, careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered.

5. Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Strong oxidizer. Contact with combustible materials may cause a fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Substance is noncombustible. Use water with caution and in flooding amounts. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Some oxidizers may react explosively with hydrocarbons(fuel). May decompose explosively when heated or involved in a fire. May accelerate burning if involved in a fire.

Extinguishing Media:

Use water only! Do NOT use carbon dioxide. Do NOT use dry chemical. Do NOT get water inside containers. Contact professional fire-fighters immediately. Cool containers with flooding quantities of water until well after fire is out. For large fires, flood fire area with large quantities of water, while knocking down vapors with water fog.

Flash Point:

Noncombustible

Autoignition Temperature:

Noncombustible

Explosion Limits, Lower:

40 vol %

Upper:

100 vol %

6. Accidental Release Measures

Spill Response:

Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under Exposure / Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk.

Take up and containerize for proper disposal as described under Disposal. Comply with Federal, State, and local regulations on reporting releases. Refer to Regulatory Information for reportable quantity and other regulatory data. EM SCIENCE recommends SPILL-X neutralizers and absorbent agents for various types of spills.

Additional information on the SPILL-X products can be provided through the EM SCIENCE Technical Service Department (856) 423-6300. The following EM SCIENCE SPILL-X neutralizer and absorbent is recommended for this product: SX0861 Spill-X-A Acid Spill Treatment Kit.

7. Handling and Storage

Handling & Storage:

Vent all containers to prevent pressure buildup; keep upright. Store in a cool, ventilated, non-combustible area remote from combustible, organic, readily oxidizable materials and catalytic metals; protect from physical damage. Do not breathe vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution! Never return unused Hydrogen Peroxide to original container.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

Hydrogen Peroxide:

-OSHA Permissible Exposure Limit (PEL)-

1.4 mg/m³ (TWA)

-ACGIH Threshold Limit Value (TLV)-

1ppm (TWA)

Water: none

Ventilation System: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Respirators (NIOSH Approved): A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Wear appropriate protective gloves to prevent skin exposure.

Eye Protection:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

9. Physical and Chemical Properties

Boiling Point (C 760 mmHg) :

105.55C

Melting Point (C):

-33C

Specific Gravity (H₂O = 1) :

1.11

Vapor Pressure (mm Hg):

24 30C

Percent Volatile by vol (%):

70%

Vapor Density (Air = 1) :

N/A

Evaporation Rate (BuAc = 1):

>1

Solubility in Water (%) :

Miscible

Appearance:

Clear, colorless liquid, sharp odor

10. Stability and Reactivity

Chemical Stability:

Decomposes slowly to release oxygen. Unstable when heated or contaminated with heavy metals, reducing agents, rust, dirt or organic materials. Stability is reduced when pH is above 4.0.

Conditions to Avoid:

Mechanical shock, incompatible materials, light, ignition sources, dust generation, excess heat, combustible materials, reducing agents, alkaline materials, strong oxidants, rust, dust, pH > 4.0.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong reducing agents, acetic acid, acetic anhydride, alcohols, brass, copper, copper alloys, finely powdered metals, galvanized iron, hydrazine, iron, magnesium, nitric acid, sodium carbonate, potassium permanganate, cyanides (e.g. potassium cyanide, sodium cyanide), ethers (e.g. dioxane, furfuran, tetrahydrofuran (THF)), urea, chlorosulfonic acid, alkalis, lead, nitrogen compounds, triethylamine, silver, nickel, palladium, organic matter, charcoal, sodium borate, aniline, platinum, formic acid, cyclopentadiene, activated carbon, tert-butyl alcohol, hydrogen selenide, manganese dioxide, mercurous chloride, rust, ketones, carboxylic acids, glycerine, sodium fluoride, sodium pyrophosphate, soluble fuels (acetone, ethanol, glycerol), wood, wood, asbestos, hexavalent chromium compounds, salts of iron, copper, chromium, vanadium, tungsten, molybdeum, and platinum.

Hazardous Decomposition Products:

Oxygen, hydrogen gas, water, heat, steam.

Hazardous Polymerization:

Will not occur.

11. Toxicological Information

RTECS#:

CAS# 7722-84-1: MX0887000; MX0890000; MX0899000; MX0899500; MX0900000

CAS# 7732-18-5: ZC0110000

LD50/LC50:

CAS# 7722-84-1:

Inhalation, rat: LC50 = 2 gm/m³/4H;

Oral, mouse: LD50 = 2 gm/kg;

Skin, rat: LD50 = 4060 mg/kg;<BR.

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg;<BR.

Carcinogenicity:

CAS# 7722-84-1:

ACGIH: A3 - Animal Carcinogen

IARC: Group 3 carcinogen CAS# 7732-18-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Neurotoxicity: No information available.

Mutagenicity: CAS#: 7722-84-1 Mutation in Microorganisms: Salmonella typhimurium = 100 ug/plate.; Hyman, embryo = 50 umol/L.; Cytogenetic Analysis: Human, embryo = 20 umol/L. Mutation in Mammalian Somatic Cells: Hamster, lung = 1mmol/L.

12. Ecological Information

Ecotoxicity:

Fish: Carp: LC50 = 42 mg/L; 48 Hr; Unspecified Fathead Minnow: LC50 = 16.4 mg/L; 96 Hr; Fresh water Fathead Minnow: NOEC = 5 mg/L; 96 Hr; Fresh water flea Daphnia: EC50 = 2.4 mg/L; 48 Hr; Fresh water Channel catfish: LC50 = 37.4 mg/L; 96 Hr; Fresh water No data available.

Environmental:

Rain washout is expected due to condensation of hydrogen peroxide on contact with water droplets. In the atmosphere, indirect photooxidation is predicted with a half-life of 10 to 20 hours. Non-significant evaporation and adsorption from water surfaces and soil/sediments is expected. Rapid and considerable aerobic biodegradation was determined with a half-life < 1 minute (biological treatment sludge) and 0.3 to 2 days (fresh water). Hydrogen peroxide is non-bioaccumulable.

Physical:

No information available.

Other:

No information available.

13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

14. Transport Information

DOT Proper Shipping Name:

Hydrogen Peroxide, Aqueous Solution

DOT ID Number :

UN2014

15. Regulatory Information

US FEDERAL

TSCA

CAS# 7722-84-1 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

CAS# 7722-84-1: concentration > 52%: TPQ = 1000 pounds; RQ = 1000 pounds

SARA Codes

CAS # 7722-84-1: acute, flammable.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

CAS# 7722-84-1 is considered highly hazardous by OSHA.

STATE

CAS# 7722-84-1 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

15. Other Information

NFPA Rating: Health: 2; Flammability: 0; Instability: 1; Special Hazard: Oxidizer

Label Hazard Warning:

DANGER! STRONG OXIDIZER. CAUSES BURNS. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. POSSIBLE CANCER HAZARD. MAY CAUSE CANCER BASED ON ANIMAL DATA. MAY CONTAIN GAS UNDER PRESSURE.

Label Precautions :

Do not get into eyes, on skin or on clothing. Do not store near and avoid contact with combustible materials. Do not breathe mist or vapor. Do not take internally. Store in a cool place. Explosion proof refrigerator recommended for storage. Absorb spills with an inert material, and then place in a chemical waste container. Flush residual spill area with water.

Label First Aid:

Call a Physician. IF CONTACTED: immediatley flush skin or eyes with plenty of water for at least 15 minutes; for eyes get medical attention. IF SWALLOWED: Do not induce vommiting. Give cold water freely if patient is conscious.

Product Use:

Intended for laboratory and manufacturing use only. Not for drug, food or household use.

Revision Information:

none

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