SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Hydrogen Peroxide, 10%**

SYNONYMS: Hydrogen Peroxide 10% solution

CATALOG CODES: VHO
MANUFACTURER: Volu-Sol
ADDRESS: 5095 West 2100 South
Salt Lake City, UT 84120

EMERGENCY PHONE: (800) 535-5053
OTHER CALLS: (801) 974-9474
FAX: (801) 974-9553

CHEMICAL FAMILY: -
CHEMICAL FORMULA: -
PREPARED BY: Volu-Sol

RECOMMENDED USE: Laboratory chemicals

RESTRICTIONS ON USE: Use as recommended

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW:

GHS Classification:

Acute toxicity, oral	(Category 4)
Serious eye damage	(Category 1)
Oxidizing liquids	(Category 3)

GHS LABEL ELEMENTS:

Pictogram:

Signal Word: Danger

Hazard Statement(s):

H318	Causes serious eye damage
H302	Harmful if swallowed
H272	May intensify fire; oxidizer

Precautionary Statement(s):

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P220	Keep/store away from clothing/flammable materials/combustible materials
P221	Take any precaution to avoid mixing with combustibles – flammables
P264	Wash skin thoroughly after handling
P280	Wear protective gloves/ eye protection/ face protection
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310	Immediately call a POISON CENTER or doctor
P330	Rinse mouth

OTHER HAZARDS: -

HMIS Classification:
Health hazard: 3
Chronic health hazard: -
Flammability: 0
Physical hazards: 2

NFPA Rating:
Health hazard: 3
Fire: 0
Reactivity Hazard: 2

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO. EC-NO. Index-NO.
Hydrogen peroxide (10%)	7722-84-1 231-765-0 008-003-00-9

SECTION 4: FIRST AID MEASURES

INHALATION: Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice

INGESTION: Rinse mouth. Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. Never give anything by mouth to an unconscious person

SKIN: Wash off with soap and plenty of water. Consult a physician

EYE: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Seek immediate medical attention/advice

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: **Percentage by Volume**
Upper: %
Lower: %

FLASH POINT: -

AUTOIGNITION TEMPERATURE:

EXTINGUISHING MEDIA: Use water spray

FIRE FIGHTING PROCEDURES: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode

FIRE AND EXPLOSION HAZARDS: Use water spray to cool unopened containers

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Isolate and post spill area. Keep people away from and upwind of spill/leak. Eliminate all sources of ignition and remove combustible materials. Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. 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 fire. Prevent material from entering into soil, ditches, sewers, waterways, and/or groundwater. Dike to collect large liquid spills. Stop leak and contain spill if this can be done safely. Small spillage: Dilute with large quantities of water. Flush area with flooding quantities of water. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Keep/Store away from clothing/ combustible materials. Wear personal protective equipment. Reference to other sections. Never return unused hydrogen peroxide to original container. Contamination may cause decomposition and generation of oxygen gas which could result in high pressures and possible container rupture. Empty drums should be triple rinsed with water before discarding. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic. Pipes and equipment should be passivated before first use. Use only in well-ventilated areas. Hydrogen peroxide should be stored only in vented containers and transferred only in a prescribed manner. Keep containers in cool areas out of direct sunlight and away from combustibles. Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into work environment. Containers must be vented. Keep/store only in original container. Store rooms or warehouses should be made of non-combustible materials with impermeable floors. In case of release, spillage should flow to safe area. Containers should be visually inspected on a regular basis to detect any abnormalities (swollen drums, increases in temperature, etc.)

INCOMPATIBILITES: Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS: Reported in a time-weighted average (TWA)

Component	CAS-No.	OSHA		ACGIH	
		ppm	mg/m³	ppm	mg/m³

Hydrogen peroxide	7722-84-1	1 PEL	1.4 PEL	1 TLV	

VENTILATION SYSTEM: Local and/or general exhaust is recommended to keep exposure below limits. Local exhaust ventilation is preferred for control of the emissions at its source, preventing dispersion into the general work area. Please refer to the ACGIH document, *Industrial Ventilation: A Manual of Recommended Practices*, for details

PERSONAL RESPIRATORS: 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).

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.

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: liquid, colourless
ODOR: -
SOLUBILITY: -
pH: -
BOILING POINT: -
MELTING POINT: -
VAPOR PRESSURE: -
DENSITY: -
VISCOSITY: -
REFRACTIVE INDEX: -

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended conditions of use and storage

CONDITIONS TO AVOID: Excessive heat; Contamination; Exposure to UV-rays; pH variations.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No data available

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Acute Toxicity: No data available
Skin/Eye Irritation: Corrosive. Risk of serious damage to eyes
Carcinogenicity:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC.
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 known or anticipated carcinogen by OSHA.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Toxicity: No data available
Persistence and degradability: No data available
Mobility in soil: No data available
PBT/vPvB Results: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

US DOT	IATA	IMDG/IMO
Shipping Name: Hydrogen Peroxide, aqueous solution	Shipping Name: Hydrogen Peroxide, aqueous solution	Shipping Name: Hydrogen Peroxide, aqueous solution
Hazard Class: 5.1	Hazard Class: 5.1	Hazard Class: 5.1
UN Number: 2984	UN Number: 2984	UN Number: 2984
Packing Group: III	Packing Group: III	Packing Group: III

SECTION 15: REGULATORY INFORMATION

SARA 302	7722-84-1
SARA 313	-
SARA 311/312 Hazards	Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard
State	Right to know lists: MA: 7722-84-1 PA: 7732-18-5, 7722-84-1 NJ: 7732-18-5, 7722-84-1 California Prop. 65 Components:

SECTION 16: OTHER INFORMATION

Disclaimer: The information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.