

## Material Safety Data Sheet

### SECTION 1: Chemical Product and Company Identification

**Manufacturer:** Cumberland Swan  
One Swan Drive  
Smyrna, TN 37167

Date: November 1999

**Product: Hydrogen Peroxide 3%**

**Telephone:** (615) 459-8900

**24hr. Emergency:** (615) 459-8900 ext. 5270

### SECTION 2: Composition / Information in Ingredients

Name: Hydrogen Peroxide, H<sub>2</sub> O<sub>2</sub>      CAS#: 7722-84-1

OSHA PEL: 1ppm (TWA)

Name: Water

### SECTION 3: Hazards Identification

Colorless, odorless liquid that is slightly acidic. Hydrogen peroxide in this concentration is a mild oxidizer, prolonged exposure to elevated concentrations of vapors may result in irritation of the eyes, nose, and throat. Prolonged dermal exposure can result in mild skin irritation.

**Potential Routes of Exposure:** Ingestion, inhalation, dermal contact, eye contact

**Target Organs:** Eyes, skin, respiratory system

**Symptoms of Overexposure:**

Inhalation: Irritation of eyes, nose and throat.

Ingestion: Irritation of the upper G.I. tract, possible distension of the esophagus or stomach.

Dermal Contact: Vesicles on skin, bleaching hair, general irritation of skin

Acute Effects: Irritation of skin as noted above

Chronic Effects: No data

Pre-existing disorders of the skin may be exacerbated by exposure of hydrogen peroxide

HMIS: H=2, F=0, R=1 See Section 8 for PPE information

### SECTION 4: First Aid Measures

Eye: Flush eyes with copious amount of water for at least 15 minutes

Skin: Flush with water. If irritation persists, seek medical attention.

Ingestion: Drink plenty of water or milk immediately to dilute. Do not induce vomiting. Seek medical attention or contact the poison control center.

Inhalation: Remove victim to fresh air and seek medical attention

## SECTION 5: Fire Fighting Measures

Extinguishing Media: Use water fog, alcohol foam, dry chemical or CO<sub>2</sub>

Unusual Fire or

Explosion Hazards: Decomposition releases oxygen which may intensify fire (see section 9)

Recommendations: Extinguish fire using agent suitable for surrounding fire. Cool containers exposed to fire with flooding quantities of water.

## SECTION 6: Accidental Release Measures

Large Spills: Evacuate the area of unprotected personnel. Utilize appropriate level of personal protective equipment. Contain source if it is safe to do so. Dike or otherwise confine spilled product. Keep away from open flame.

Small Spills: Dilute with large amounts of water and if possible, direct solution to diked area and hold until decomposed.

## SECTION 7: Handling and Storage

Storage Requirements: Store in tightly closed containers in a cool, dry area away from heat and other possible ignition source.

Handling Precautions: Maintain appropriate class of fire extinguishers nearby in case of fire.

## SECTION 8: Exposure Controls / Personal Protection

OSHA PEL=1ppm (TWA)      OSHA STEL=N/A      IDLH=75ppm

**Recommended Engineering Controls:** Use ventilation equipment as necessary.

**Recommended Admin Controls:** Train employees on the hazards of Hydrogen Peroxide

**PPE:** Wear chemical goggles where the threat of exposure exists. Gloves should be worn if the user has sensitive skin or frequently use the product. Eye wash fountains should be provided for personnel in areas where eye exposure is possible.

**Recommended Hygiene Practices:** Clean PPE and work clothing contaminated with hydrogen peroxide prior to reuse.

## SECTION 9: Physical and Chemical Properties

|                        |                    |                          |                     |                       |          |
|------------------------|--------------------|--------------------------|---------------------|-----------------------|----------|
| <b>Appearance:</b>     | Colorless liquid   | <b>Freezing Point:</b>   | <0 <sup>0</sup> C   | <b>Autoignition:</b>  | N/A      |
| <b>Odor:</b>           | Slightly Sharp     | <b>Water Solubility:</b> | Miscible            | <b>LEL:</b>           | N/A      |
| <b>Odor Threshold:</b> | No Data            | <b>Molecular Weight:</b> | 18.5 (app)          | <b>UEL:</b>           | N/A      |
| <b>Vapor Pressure:</b> | 10.1mm             | <b>Specific Gravity:</b> | 1.0                 | <b>Vapor Density:</b> | .63(app) |
| <b>Boiling Point:</b>  | 214 <sup>0</sup> F | <b>Flash Point:</b>      | >200 <sup>0</sup> F |                       |          |

## SECTION 10: Stability and Reactivity

Stability: Slightly unstable

Polymerization: Will not occur

Conditions to avoid: Heat, sparks, and open flame, contact with incompatible materials. Hydrogen Peroxide in great concentrations is incompatible with reducing agents, rust, dirt, organic materials.

Hazardous Products:  
of Decomposition: Decomposition releases oxygen which may intensify fire.

## **SECTION 11: Toxicological Information**

LD50: 4060 mg/kg (dermal rat)      LC50: 2000 mg/m3 (4hr inhalation, rat)  
LDL0: 227 ppm (inhalation- mouse)  
Carcinogenicity:                      Not identified as a carcinogen by OSHA, IARC, or NTP  
Mutagenicity:                          Not Indicated  
Reproductive Effects:      Not Indicated

## **SECTION 12: Ecological Information**

**Ecotoxicity:** N/A      **Environmental Fate:** N/A      **Soil Absorption/Mobility:** Highly Mobile

**Environmental Degradation:** Should be removed readily from soils and water by volatilization and biodegradation.

## **SECTION 13: Disposal Considerations**

Disposal: Contact your supplier or a licensed contractor for detailed recommendations.  
Disposal Regulatory Requirements: Follow applicable federal, state and local regulations.

## **SECTION 14: Transport Information**

Shipping Name: Hydrogen Peroxide (Non Regulated in concentrations <8%)

## **SECTION 15: Regulatory Information**

RCRA Hazardous Waste Number/Classification: N/A  
CERCLA Substance: N/A  
CERCLA Reportable Quantity: 10,000 lbs (Default)  
SARA 311/312 Codes: N/A  
SARA Toxic Chemical: N/A

## **SECTION 16: Other Information**

Prepared by: Cumberland Swan

Source of Information: 29CFR1910.1000; NIOSH Pocket Guide to Chemical Hazards (1993); Occupational Health Guidelines for Chemical Hazards; NFPA Guide to Hazardous Materials - 10th Edition.

Disclaimer: While reasonable care has been taken to ensure the accuracy and completeness of the information regarding the material described herein, it is the purchaser's responsibility to ensure the suitability of such information as it applies to the purchaser's intended use of the material.