



## SAFETY DATA SHEET

Creation Date 09-Jun-2009

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Revision Number 1

### 1. Identification

**Product Name** Hydrogen Peroxide 3 - 6%

**Cat No. :** C4373, C4374, C4379, C4380

**Synonyms** Hydrogen dioxide; Hyperoxide (USP/Certified)

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**  
Lab Alley LLC  
22111 Highway 71 West, Suite 601  
Spicewood, Texas 78669  
Tel: 512-668-9918

### 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation Category 2

**Label Elements**

**Signal Word**

Danger

**Hazard Statements**

Causes serious eye irritation



**Precautionary Statements**

Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition / information on ingredients

Component	CAS-No	Weight %
Water	7732-18-5	94-97
Hydrogen peroxide	7722-84-1	3-6
Acetic acid	64-19-7	<1

### 4. First-aid measures

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	Do not induce vomiting. Obtain medical attention.
<b>Most important symptoms/effects Notes to Physician</b>	Causes eye burns. Treat symptomatically

### 5. Fire-fighting measures

<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Non-combustible. Containers may explode when heated.

**Hazardous Combustion Products**

oxygen

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**Health  
2Flammability  
0Instability  
1Physical hazards  
N/A**6. Accidental release measures****Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment.

**Environmental Precautions**

Should not be released into the environment. See Section 12 for additional ecological information. Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean Up** Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.**7. Handling and storage****Handling**

Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation.

**Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight.

**8. Exposure controls / personal protection****Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrogen peroxide	TWA: 1 ppm	(Vacated) TWA: 1 ppm (Vacated) TWA: 1.4 mg/m <sup>3</sup> TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup>	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup>
Acetic acid	TWA: 10 ppm STEL: 15 ppm	(Vacated) TWA: 10 ppm (Vacated) TWA: 25 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Hydrogen peroxide	TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 1.5 mg/m <sup>3</sup> STEL: 2 ppm STEL: 3 mg/m <sup>3</sup>	TWA: 1 ppm
Acetic acid	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 mg/m <sup>3</sup>	TWA: 10 ppm STEL: 15 ppm

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment****Eye/face 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.

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

No protective equipment is needed under normal use conditions.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

**9. Physical and chemical properties**

<b>Physical State</b>	Liquid
<b>Appearance</b>	Clear
<b>Odor</b>	Slight
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	0 °C / 32 °F
<b>Boiling Point/Range</b>	100 °C / 212 °F @ 760mmHg
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid,gas)</b>	Not applicable
<b>Flammability or explosive limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Vapor Pressure</b>	23.3 mmHg @ 30°C
<b>Vapor Density</b>	> 1.00 (Air = 1.0)
<b>Relative Density</b>	1.00
<b>Solubility</b>	Soluble in water
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No information available
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	No information available
<b>Molecular Formula</b>	H <sub>2</sub> O <sub>2</sub>
<b>Molecular Weight</b>	34

**10. Stability and reactivity**

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Light sensitive.
<b>Conditions to Avoid</b>	Incompatible products. Excess heat. Exposure to light.
<b>Incompatible Materials</b>	Powdered metals, Powdered metal salts
<b>Hazardous Decomposition Products</b>	oxygen
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

**11. Toxicological information****Acute Toxicity****Product Information****Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrogen peroxide	376 mg/kg ( Rat ) (90%) 910 mg/kg ( Rat ) (20-60%) 1518 mg/kg ( Rat ) (8-20% sol)	>2000 mg/kg ( Rabbit )	2 g/m <sup>3</sup> ( Rat ) 4 h
Acetic acid	3310 mg/kg ( Rat )	1060 mg/kg ( Rabbit )	11.4 mg/L ( Rat ) 4 h

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** Severe eye irritant

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Hydrogen peroxide	7722-84-1	Not listed	Not listed	A3	Not listed	A3
Acetic acid	64-19-7	Not listed	Not listed	Not listed	Not listed	Not listed

*IARC: (International Agency for Research on Cancer)*

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*Group 1 - Carcinogenic to Humans*

*Group 2A - Probably Carcinogenic to Humans*

*Group 2B - Possibly Carcinogenic to Humans*

*A1 - Known Human Carcinogen*

*A2 - Suspected Human Carcinogen*

*A3 - Animal Carcinogen*

*ACGIH: (American Conference of Governmental Industrial Hygienists)*

*ACGIH: (American Conference of Governmental Industrial Hygienists)*

*Mexico - Occupational Exposure Limits - Carcinogens*

*Mexico - Occupational Exposure Limits - Carcinogens*

*A1 - Confirmed Human Carcinogen*

*A2 - Suspected Human Carcinogen*

*A3 - Confirmed Animal Carcinogen*

*A4 - Not Classifiable as a Human Carcinogen*

*A5 - Not Suspected as a Human Carcinogen*

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** See actual entry in RTECS for complete information.

## 12. Ecological information

### Ecotoxicity

Contains a substance which is: Toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Hydrogen peroxide	EC50 2.5 mg/L/72h	LC50: 16.4 mg/L/96h (P.promelas)	Not listed	EC50 7.7 mg/L/24h
Acetic acid	-	Pimephales promelas: LC50 = 88 mg/L/96h Lepomis macrochirus: LC50 = 75 mg/L/96h	Photobacterium phosphoreum: EC50 = 8.8 mg/L/15 min Photobacterium phosphoreum: EC50 = 8.8 mg/L/25 min Photobacterium phosphoreum: EC50 = 8.8 mg/L/5 min	EC50 = 95 mg/L/24h

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Hydrogen peroxide	-1.1
Acetic acid	-0.2

### 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

**DOT** Not regulated  
**TDG** Not regulated  
**IATA** Not regulated  
**IMDG/IMO** Not regulated

### 15. Regulatory information

#### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Water	X	X	-	231-791-2	-		X	-	X	X	X
Hydrogen peroxide	X	X	-	231-765-0	-		X	X	X	X	X
Acetic acid	X	X	-	200-580-7	-		X	X	X	X	X

#### Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

#### U.S. Federal Regulations

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

#### SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Water Act** Not applicable

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Acetic acid	X	5000 lb	-	-

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration  
Not applicable

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Hydrogen peroxide	-	TQ: 7500 lb

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Hydrogen peroxide	-	1000 lb
Acetic acid	5000 lb	-

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Hydrogen peroxide	X	X	X	-	X
Acetic acid	X	X	X	-	X

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product contains the following DHS chemicals:

Component	DHS Chemical Facility Anti-Terrorism Standard
Hydrogen peroxide	2000 lb STQ (concentration of at least 30%)

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

**WHMIS Hazard Class** D2B Toxic materials



**16. Other information**

**Prepared By** Regulatory Affairs  
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**Creation Date** 09-Jun-2009  
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**Print Date** 10-Apr-2014  
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of SDS**