# Hydrogen Peroxide, 2% w/w

## Safety Data Sheet

**Date of issue:** 02/17/2015  
**Revision date:** 07/08/2016  
**Supersedes:** 09/22/2015  
**Version:** 2.0

### SECTION 1: Identification

#### 1.1. Identification

- **Product form:** Mixtures  
- **Product name:** Hydrogen Peroxide, 2% w/w  
- **Product code:** LC15440

#### 1.2. Recommended use and restrictions on use

- **Use of the substance/mixture:** For laboratory and manufacturing use only.  
- **Recommended use:** Laboratory chemicals  
- **Restrictions on use:** Not for food, drug or household use

#### 1.3. Supplier

- **LabChem Inc**  
  Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court  
  Zelienople, PA 16063 - USA  
  T 412-826-5230 - F 724-473-0647  
  info@labchem.com - www.labchem.com

#### 1.4. Emergency telephone number

- **Emergency number:** CHEMTREC: 1-800-424-9300 or 011-703-527-3887

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

- **GHS-US classification**
  - **Skin corrosion/irritation**  
    - **Category 2:** H315 - Causes skin irritation  
    - **Serious eye damage/eye irritation Category 2A:** H319 - Causes serious eye irritation

- **Full text of H statements:** see section 16

#### 2.2. GHS Label elements, including precautionary statements

- **GHS-US labeling**
  - **Hazard pictograms (GHS-US):**
  - **Signal word (GHS-US):** Warning  
  - **Hazard statements (GHS-US):** H315 - Causes skin irritation  
    - **H319 - Causes serious eye irritation**

- **Precautionary statements (GHS-US):**
  - **P264 - Wash exposed skin thoroughly after handling**  
  - **P280 - Wear protective gloves, eye protection**  
  - **P302+P352 - IF ON SKIN: Wash with plenty of soap and water**  
  - **P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing**  
  - **P332+P313 - IF SKIN IRRITATION OCCURS: Get medical advice/attention**  
  - **P337+P313 - IF EYE IRRITATION PERSISTS: Get medical advice/attention**  
  - **P362+P364 - Take off contaminated clothing and wash it before reuse**

#### 2.3. Other hazards which do not result in classification

- **Other hazards not contributing to the classification:** None under normal conditions.

#### 2.4. Unknown acute toxicity (GHS US)

- **Not applicable**

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

- **Not applicable**
3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>98</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
| Hydrogen Peroxide, 30% w/w| (CAS-No.) 7722-84-1| 2 | Ox. Liq. 1, H271  
Acute Tox. 4 (Oral), H302  
Acute Tox. 4 (Inhalation), H332  
Skin Corr. 1A, H314 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media


Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Reactivity : Decomposes slowly on exposure to light.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Gloves.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.
SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures: Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Light sensitive. Keep container closed when not in use.
Incompatible products: Strong reducing agents, metals, combustible materials, Strong bases.
Incompatible materials: Sources of ignition, Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substances</th>
<th>ACGIH TWA (mg/m³)</th>
<th>ACGIH TWA (ppm)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
<th>OSHA PEL (TWA) (ppm)</th>
<th>US IDLH (ppm)</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
<th>NIOSH REL (TWA) (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide, 30% w/w (7722-84-1)</td>
<td>1.4 mg/m³</td>
<td>1 ppm</td>
<td>1.4 mg/m³</td>
<td>1 ppm</td>
<td>75 ppm</td>
<td>1.4 mg/m³</td>
<td>1 ppm</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls
Appropriate engineering controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Gloves. Safety glasses.

Hand protection:
Wear protective gloves

Eye protection:
Chemical goggles or safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Wear appropriate mask

Other information:
Do not eat, drink or smoke during use.
### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>None.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific gravity / density</td>
<td>1 g/ml</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2 Other information

No additional information available

### SECTION 10: Stability and reactivity

10.1 Reactivity

 Decomposes slowly on exposure to light.

10.2 Chemical stability

 Light sensitive.

10.3 Possibility of hazardous reactions

 Refer to section 10.1 on Reactivity.

10.4 Conditions to avoid

 Direct sunlight. Extremely high or low temperatures.

10.5 Incompatible materials


10.6 Hazardous decomposition products

 Oxygen.

### SECTION 11: Toxicological information

11.1 Information on toxicological effects

Likely routes of exposure: Inhalation; Skin and eye contact

Acute toxicity: Not classified

<table>
<thead>
<tr>
<th>Hydrogen Peroxide, 30% w/w (7722-84-1)</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (oral)</td>
<td>500 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>4500 ppmV/4h</td>
</tr>
</tbody>
</table>
Hydrogen Peroxide, 2% w/w
Safety Data Sheet

Hydrogen Peroxide, 30% w/w (7722-84-1)
ATE US (vapors) 11 mg/l/4h
ATE US (dust, mist) 1.5 mg/l/4h

Water (7732-18-5)
LD50 oral rat ≥ 90000 mg/kg
ATE US (oral) 90000 mg/kg body weight
Skin corrosion/irritation Causes skin irritation.
Serious eye damage/irritation Causes serious eye irritation.
Respiratory or skin sensitization Not classified
Germ cell mutagenicity Not classified
Carcinogenicity Not classified

Hydrogen Peroxide, 30% w/w (7722-84-1)
IARC group 3 - Not classifiable
Reproductive toxicity Not classified
Specific target organ toxicity – single exposure Not classified
Specific target organ toxicity – repeated exposure Not classified
Aspiration hazard Not classified
Potential Adverse human health effects and symptoms Based on available data, the classification criteria are not met.
Symptoms/effects after skin contact Causes skin irritation.
Symptoms/effects after eye contact Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability

Hydrogen Peroxide, 2% w/w
Persistence and degradability Not established.

Hydrogen Peroxide, 30% w/w (7722-84-1)
Persistence and degradability Not established.

Water (7732-18-5)
Persistence and degradability Not established.

12.3. Bioaccumulative potential

Hydrogen Peroxide, 2% w/w
Bioaccumulative potential Not established.

Hydrogen Peroxide, 30% w/w (7722-84-1)
Bioaccumulative potential Not established.

Water (7732-18-5)
Bioaccumulative potential Not established.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming No known effects from this product.
GWPmix comment No known effects from this product.
Other information Avoid release to the environment.
SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Hydrogen Peroxide, 2% w/w</th>
<th>Hazard Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 311/312</td>
<td>Immediate (acute) health hazard</td>
</tr>
</tbody>
</table>

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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<th>Hydrogen Peroxide, 30% w/w (7722-84-1)</th>
<th>Hazard Classes</th>
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</thead>
<tbody>
<tr>
<td>SARA Section 311/312</td>
<td>Reactive hazard</td>
</tr>
<tr>
<td></td>
<td>Immediate (acute) health hazard</td>
</tr>
</tbody>
</table>

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 07/08/2016

Other information : None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>H271</th>
<th>May cause fire or explosion; strong oxidizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
</tbody>
</table>
**Hydrogen Peroxide, 2% w/w**

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>NFPA health hazard</th>
<th>2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA fire hazard</td>
<td>0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.</td>
</tr>
<tr>
<td>NFPA reactivity</td>
<td>1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.</td>
</tr>
<tr>
<td>NFPA specific hazard</td>
<td>OX - Materials that posses oxidizing properties.</td>
</tr>
</tbody>
</table>

**Hazard Rating**

**Health**  
2 Moderate Hazard - Temporary or minor injury may occur

**Flammability**  
0 Minimal Hazard - Materials that will not burn

**Physical**  
1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

**Personal protection**  
B - Safety glasses, Gloves

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