Hydrogen Peroxide, 6%

Section 1: Product and Company Identification

Synonyms/General Names: N/A
Product Use: For educational use only
Manufacturer: Columbus Chemical Industries, Inc., Columbus, WI 53925.

24 Hour Emergency Information Telephone Numbers
CHEMTREC (USA): 800-424-9300  CANUTEC (Canada): 613-424-6666
ScholAR Chemistry; 5100 W. Henrietta Rd, Rochester, NY 14586; (866) 260-0501; www.Scholarchemistry.com

Section 2: Hazards Identification

Clear, colorless liquid, slight odor

WARNING! Strong oxidizing agent and body tissue irritant.
Target organs: None known.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Section 3: Composition / Information on Ingredients

Hydrogen Peroxide, 35% (7722-84-1), 8-9%.
Water (7732-18-5), 91-92%.

Section 4: First Aid Measures

Always seek professional medical attention after first aid measures are provided.

Eyes: Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.
Skin: Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.
Ingestion: Call Poison Control immediately. Do not induce vomiting. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration.

Section 5: Fire Fighting Measures

Oxidizing agent. When heated to decomposition, emits oxygen gas.

Protective equipment and precautions for firefighters: Use foam or dry chemical to extinguish fire. Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.

Section 6: Accidental Release Measures

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all ignition sources and ventilate area. Contain spill with sand or absorbent material and place material in a sealed bag or container for disposal. Wash spill area after pickup is complete. See Section 13 for disposal information.

Section 7: Handling and Storage

Handling: Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling.
Storage: Store in General Storage Area [Green Storage] with other items with no specific storage hazards. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.

Section 8: Exposure Controls / Personal Protection

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Use NIOSH-approved respirator with an acid/organic cartridge. Exposure guidelines Hydrogen Peroxide: OSHA PEL: 1.4 mg/m³; ACGIH TLV: 1.4 mg/m³; STEL:N/A.
Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular formula</td>
<td>H₂O₂</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>34.01</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.01 g/mL @ 20°C</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>0.7</td>
</tr>
<tr>
<td>Melting Point</td>
<td>0°C</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>100°C</td>
</tr>
<tr>
<td>Vapor Pressure (20°C)</td>
<td>14</td>
</tr>
<tr>
<td>Flash Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Autoignition Temp.</td>
<td>N/A</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, colorless liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight odor.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>Completely soluble in water.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>&lt; 1 (Butyl acetate = 1)</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A (log P&lt;sub&gt;ow&lt;/sub&gt;).</td>
</tr>
<tr>
<td>Melting Point</td>
<td>0°C</td>
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<td>N/A</td>
</tr>
</tbody>
</table>

Section 10: Stability and Reactivity

Avoid heat and ignition sources.

Stability: Instable, many materials will catalyze the decomposition of hydrogen peroxide to produce oxygen, water, and heat.

Incompatibility: Reducing agents, alkalis, organic materials, metals, acids, bases, metal salts, dust and dirt contaminants and flammable substances.

Shelf life: Fair shelf life, store in a cool, dry environment.

Section 11: Toxicology Information


Ingestion: Irritation and burning sensations of mouth and throat, nausea, vomiting and abdominal pain. Inhalation: Irritation of mucous membranes, coughing, wheezing, shortness of breath.

Chronic Effects: Repeated/prolonged skin contact may cause thickening, blackening or cracking. Repeated eye exposure may cause corneal erosion or loss of vision.

Sensitization: none expected

Hydrogen Peroxide: LD50 [oral, rat]: N/A; LC50 [rat]: N/A; LD50 Dermal [rabbit]: N/A

Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

Section 12: Ecological Information

Ecotoxicity (aquatic and terrestrial): Toxic to beneficial microorganisms (e.g. soil and sewage treatment microorganisms). Do not release to environment.

Section 13: Disposal Considerations

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may decomposed into water using a catalyst.

Section 14: Transport Information

DOT Shipping Name: Not regulated by DOT.

DOT Hazard Class: Hazard Class:

Identification Number: UN Number:

Section 15: Regulatory Information

EINECS: Listed (231-765-0).

TSCA: All components are listed or are exempt.

WHMIS Canada: Not WHMIS controlled.

California Proposition 65: Not listed.

The product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16: Other Information

Current Issue Date: January 23, 2009

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