1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: Hydrogen Peroxide 31% RGS2

Other means of identification

CAS-No: 7722-84-1

Recommended use of the chemical and restrictions on use

Recommended Use: Etchant and cleaner for Electronics industry

Restrictions on Use: Use as recommended by the label.

Manufacturer/Supplier

PeroxyChem LLC
2005 Market Street
Suite 3200
Philadelphia, PA 19103
Phone: +1 267/ 422-2400 (General Information)
E-Mail: sdsinfo@peroxychem.com

PeroxyChem Canada
PG Pulp Mill Road
Prince George, BC V2N2S6
1+ 250/ 561-4200 (General Information)

Emergency telephone number

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)
1 613/ 996-6666 (CANUTEC - Canada)
1 303/ 389-1409 (Medical - U.S. - Call Collect)
1 281 / 474-8750 (Bayport, Texas Plant)
1 250 / 561-4221 (Prince George, BC, Canada Plant)

2. HAZARDS IDENTIFICATION

Classification

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

<table>
<thead>
<tr>
<th>Acute toxicity - Oral</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Oxidizing Liquids</td>
<td>Category 2</td>
</tr>
</tbody>
</table>
GHS Label elements, including precautionary statements

**EMERGENCY OVERVIEW**

**Danger**

**Hazard Statements**
- P318 - Causes serious eye damage
- H302 - Harmful if swallowed
- H272 - May intensify fire, oxidizer

**Precautionary Statements - Prevention**
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P220 - Keep/Store away from clothing/flammable materials/combustibles
- P221 - Take any precaution to avoid mixing with combustibles/flammables

**Precautionary Statements - Response**
- 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
- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
- P330 - Rinse mouth
- P370 + P378 - In case of fire: Use water for extinction

**Hazards not otherwise classified (HNOC)**
No hazards not otherwise classified were identified.

**Other Information**
- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur. IF ON SKIN OR CLOTHING: Wash with plenty of water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.
- Keep container in a cool place out of direct sunlight. Store only in vented containers. Do not store on wooden pallets. Do not return unused material to its original container. Avoid contamination - Contamination could cause decomposition and generation of oxygen which may result in high pressure and possible container rupture. Empty drums should be triple rinsed with water before discarding.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>7722-84-1</td>
<td>31</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>69</td>
</tr>
</tbody>
</table>

Occupational exposure limits, if available, are listed in section 8

### 4. FIRST AID MEASURES
Hydrogen Peroxide 31% RGS2

Eye Contact
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.

Skin Contact
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

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.

Most important symptoms and effects, both acute and delayed
Hydrogen Peroxide irritates respiratory system and, if inhaled, may cause inflammation and pulmonary edema. The effects may not be immediate

Indication of immediate medical attention and special treatment needed, if necessary
Hydrogen peroxide at these concentrations is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of corrosive effects on the gastrointestinal tract after ingestion, and the unlikelihood of systemic effects, attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is a remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water. Do not use any other substance.

Specific Hazards Arising from the Chemical
In closed unventilated containers, risk of rupture due to the increased pressure from decomposition. Contact with combustible material may cause fire

Hazardous Combustion Products
On decomposition product releases oxygen which may intensify fire.

Explosion data
Sensitivity to Mechanical Impact
Not sensitive.

Sensitivity to Static Discharge
Not sensitive.

Protective equipment and precautions for firefighters
Use water spray to cool fire exposed surfaces and protect personnel. Move containers from fire area if you can do it without risk. As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
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.

Other
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.

Environmental Precautions
Keep people and animals away from and upwind of spill/leak. Do not flush into surface water or sanitary sewer system.

Methods for Containment
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.

Methods for cleaning up
Flush area with flooding quantities of water. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%.
7. HANDLING AND STORAGE

Handling
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.

Storage
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.).

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
Ingredients with workplace control parameters.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>TWA: 1 ppm</td>
<td>TWA: 1 ppm</td>
<td>TWA: 1.4 mg/m³</td>
<td>Mexico: TWA 1 ppm</td>
</tr>
<tr>
<td>7722-84-1</td>
<td></td>
<td></td>
<td></td>
<td>Mexico: TWA 1.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IDLH: 75 ppm</td>
<td>Mexico: STEL 2 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TWA: 1 ppm</td>
<td>Mexico: STEL 3 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>British Columbia</th>
<th>Quebec</th>
<th>Ontario TWAEV</th>
<th>Alberta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>TWA: 1 ppm</td>
<td>TWA: 1 ppm</td>
<td>TWA: 1 ppm</td>
<td>TWA: 1 ppm</td>
</tr>
<tr>
<td>7722-84-1</td>
<td>TWA: 1.4 mg/m³</td>
<td>TWA: 1.4 mg/m³</td>
<td>TWA: 1.4 mg/m³</td>
<td>TWA: 1.4 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering measures
Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Use chemical splash-type monogoggles and a full-face shield made of polycarbonate, acetate, polycarbonate/acetate, PETG or thermoplastic.

Skin and Body Protection
For body protection wear impervious clothing such as an approved splash protective suit made of SBR rubber, PVC (PVC Outershell w/Polyester Substrate), Gore-Tex (Polyester trilaminate w/Gore-Tex), or a specialized HAZMAT Splash or Protective Suite (Level A, B, or C). For foot protection, wear approved boots made of NBR, PVC, Polyurethane, or neoprene. Overboots made of Latex or PVC, as well as firefighter boots or specialized HAZMAT boots are also permitted. DO NOT wear any form of boot or overboot made of nylon or nylon blends. DO NOT USE cotton, wool or leather as these materials react rapidly with higher concentrations of hydrogen peroxide. Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles, can cause the material to ignite and result in a fire.

Hand Protection
For hand protection, wear approved gloves made of nitrile, PVC, or neoprene. DO NOT
Hydrogen Peroxide 31% RGS2

use cotton, wool or leather for these materials react RAPIDLY with higher concentrations of hydrogen peroxide. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.

Respiratory Protection
If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA) or other approved air-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)). DO NOT use any form of air-purifying respirator (APR) or filtering facepiece (dust mask), especially those containing oxidizable sorbants such as activated carbon.

Hygiene measures
Avoid breathing vapors, mist or gas. Clean water should be available for washing in case of eye or skin contamination.

General information
Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, colorless liquid</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>&lt;= 3.7</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>-27 °C</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>107 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&gt; 1 (n-butyl acetate=1)</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>25 mm Hg @ 30 °C</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Density</td>
<td>1.12 g/cm³ @ 20°C</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.12</td>
</tr>
<tr>
<td>Water solubility</td>
<td>completely soluble</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>log Kow = -1.5 @ 20 °C</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not combustible</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>100 °C</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>1.06 cP @ 20 °C</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Strong oxidizer</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>34</td>
</tr>
<tr>
<td>Bulk density</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability
Stable under normal conditions. Decomposes on heating. Stable under recommended storage conditions.

Possibility of Hazardous Reactions
Contact with organic substances may cause fire or explosion. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

Hazardous polymerization
Hazardous polymerization does not occur.
Hydrogen Peroxide 31% RGS2

Conditions to avoid
Excessive heat; Contamination; Exposure to UV-rays; pH variations.

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

Hazardous Decomposition Products
Oxygen which supports combustion. Liable to produce overpressure in container.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral
50% solution: LD50 > 225 mg/kg bw (rat)
35 % solution:LD50 1193 mg/kg bw (rat)
70 % solution: LD50 1026 mg/kg bw (rat)

LD50 Dermal
35% solution: LD50 > 2000 mg/kg bw (rabbit)
70 % solution: LD50 9200 mg/kg bw (rabbit)

LC50 Inhalation
50% solution: LC50 > mg/m³ (rat) (4-hr)
Hydrogen Peroxide vapors: LC0 9400 mg/m³ (mouse) (5 - 15 minutes)
Hydrogen Peroxide vapors: LC50 > 2160 mg/m³ (mouse)

Serious eye damage/eye irritation
Corrosive. Severely irritating to the eyes.

Skin corrosion/irritation
Moderately irritating (rabbit).

Sensitization
Did not cause sensitization on laboratory animals.

Information on toxicological effects

Symptoms
Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate.

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

Carcinogenicity
This product contains hydrogen peroxide. The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of hydrogen peroxide in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans). The American Conference of Governmental Industrial Hygienists (ACGIH) has concluded that hydrogen peroxide is a 'Confirmed Animal Carcinogen with Unknown Relevance to Humans' (A3).

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>A3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7722-84-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mutagenicity
This product is not recognized as mutagenic by Research Agencies. In vivo tests did not show mutagenic effects.

Reproductive toxicity
This product is not recognized as reprotox by Research Agencies. No toxicity to reproduction in animal studies.

STOT - single exposure
Not classified.

STOT - repeated exposure
Not classified.

Target organ effects
Eyes, Respiratory System, Skin.

Aspiration hazard
No information available.
12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects  
Hydrogen peroxide is naturally produced by sunlight (between 0.1 and 4 ppb in air and 0.001 to 0.1 mg/L in water). Not expected to have significant environmental effects.

<table>
<thead>
<tr>
<th>Active Ingredient(s)</th>
<th>Duration</th>
<th>Species</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>96 h LC50</td>
<td>Fish Pimephales promelas</td>
<td>16.4</td>
<td>mg/L</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>72 h LC50</td>
<td>Fish Leuciscus idus</td>
<td>35</td>
<td>mg/L</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>48 h EC50</td>
<td>Daphnia pulex</td>
<td>2.4</td>
<td>mg/L</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>24 h EC50</td>
<td>Daphnia magna</td>
<td>7.7</td>
<td>mg/L</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>72 h EC50</td>
<td>Algae Skeletonema costatum</td>
<td>1.38</td>
<td>mg/L</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>21 d NOEC</td>
<td>Daphnia magna</td>
<td>0.63</td>
<td>mg/L</td>
</tr>
</tbody>
</table>

Persistence and degradability  
Hydrogen peroxide in the aquatic environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Hydrogen peroxide half-life in freshwater ranged from 8 hours to 20 days, in air from 10 - 20 hours, and in soils from minutes to hours depending upon microbiological activity and metal contamination.

Bioaccumulation  
Material may have some potential to bioaccumulate but will likely degrade in most environments before accumulation can occur.

Mobility  
Will likely be mobile in the environment due to its water solubility but will likely degrade over time.

Other Adverse Effects  
Decomposes into oxygen and water. No adverse effects.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods  
Dispose of in accordance with local regulations. Can be disposed as waste water, when in compliance with local regulations.

US EPA Waste Number  
D001

Contaminated Packaging  
Drums - Empty as thoroughly as possible. Triple rinse drums before disposal. Avoid contamination; impurities accelerate decomposition. Never return product to original container.

14. TRANSPORT INFORMATION

DOT  
UN/ID no 2014  
Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION  
Hazard class 5.1  
Subsidiary class 8  
Packing Group II

TDG  
UN/ID no UN 2014  
Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION  
Hazard class 5.1  
Subsidiary class 8  
Packing Group II
ICAO/IATA
Air regulation permit shipment of Hydrogen Peroxide (<40%) in non-vented containers for Air Cargo Only aircraft, as well as for Passenger and Cargo aircraft. HOWEVER, all PeroxyChem Hydrogen Peroxide containers are vented and therefore, air shipments of PeroxyChem H2O2 are not permitted. IATA air regulations state that venting of packages containing oxidizing substances is not permitted for air transport.

IMDG/IMO
UN/ID no UN 2014
Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class 5.1
Subsidiary Hazard Class 8
Packing Group II

OTHER INFORMATION
Protect from physical damage. Keep drums in upright position. Drums should not be stacked in transit. Do not store drums on wooden pallets.

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic health hazard</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Fire hazard</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA/EPCRA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Response Compensation and Liability Act (CERCLA) or as an extremely hazardous substance (EHS) under the Emergency Planning and Community Right to Know Act (EPCRA) / Superfund Amendments and Reauthorization Act (SARA).

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CERCLA Hazardous Substances RQs (40 CFR 302.4)</th>
<th>SARA Sec 304 Extremely Hazardous Substance RQ (40 CFR 355 Appendix A)</th>
<th>SARA Section 302 EHS Threshold Planning Quantity (40 CFR 355)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td></td>
<td>1000 lb</td>
<td>1000 lb</td>
</tr>
</tbody>
</table>

Hydrogen Peroxide RQ is for concentrations of > 52% only

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA (United States)</th>
<th>DSL (Canada)</th>
<th>EINECS/EL (Europe)</th>
<th>ENCS (Japan)</th>
<th>China (IECSC)</th>
<th>KECL (Korea)</th>
<th>PICCS (Philippines)</th>
<th>AICS (Australia)</th>
<th>NZIoC (New Zealand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Mexico - Grade
Serious risk, Grade 3
Hydrogen Peroxide 31% RGS2

CANADA

WHMIS Hazard Class

C - Oxidizing materials
D2B - Toxic materials
E - Corrosive material

16. OTHER INFORMATION

NFPA

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Stability</th>
<th>Special Hazards</th>
<th>Special precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>OX</td>
<td>H</td>
</tr>
</tbody>
</table>

HMIS

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical hazard</th>
<th>Special precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>H</td>
</tr>
</tbody>
</table>

NFPA/HMIS Ratings Legend

Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Special Hazards: OX = Oxidizer

Protection = H (Safety goggles, gloves, apron, the use of supplied air or SCBA respirator is required in lieu of a vapor cartridge respirator)

Uniform Fire Code

Oxidizer: Class 2--Liquid

Revision date: 2015-10-23

Revision note

(M)SDS sections updated: 15

Disclaimer

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End of Safety Data Sheet