

Hydrogen Peroxide, 30%

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Hydrogen Peroxide, 30%

Synonyms/Generic Names: Peroxide

SDS Number: 346.00

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc. N4335 Temkin Rd. Columbus, WI. 53925

For More Information Contact:Ward's Science 5100 West Henrietta Rd. PO Box 92912-9012 Rochester, NY 14692 (800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS INDENTIFICATION

OSHA Hazards: Oxidizer, Target organ effect, Toxic by ingestion, Corrosive, Carcinogen

Target Organs: Eyes, Skin, Respiratory system

Signal Words: Danger

Pictograms:



GHS Classification:

| Oxidizing liquids | Category 1 |
|------------------------|-------------|
| Acute toxicity, Dermal | Category 4 |
| Acute toxicity, Oral | Category 4 |
| Skin corrosion | Category 1 |
| Eye irritation | Category 1 |
| Respiratory sensitizer | Category 1B |

GHS Label Elements, including precautionary statements:

Hazard Statements:

| H271 | May cause fire or explosion; strong oxidizer | |
|------|--|--|
| H302 | Harmful if swallowed | |
| H314 | Causes severe skin burns and eye damage | |
| H333 | May be harmful if inhaled | |
| H402 | Harmful to aquatic life | |

Precautionary Statements:

| P220 | Keep/store away from clothing/combustible materials. | |
|----------------|---|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove | |
| | contact lenses if present and easy to do so. Continue rinsing. | |
| P310 | Immediately call a POISON CENTER or doctor/physician. | |

Potential Health Effects

| Eyes | May cause serious damage. |
|------------|--|
| Inhalation | Irritating to the respiratory system. Causes irritation to the respiratory tract. |
| Skin | Irritating to skin. Contact causes redness, burns, itching and pain. Prolonged or repeated skin exposure may cause dermatitis. |
| Ingestion | Causes irritation and pain. |

NFPA Ratings

| Health | 3 |
|-----------------|----|
| Flammability | 0 |
| Reactivity | 1 |
| Specific hazard | OX |

HMIS Ratings

| nino Natingo | | |
|--------------|---|--|
| Health | 3 | |
| Fire | 0 | |
| Reactivity | 1 | |
| Personal | D | |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | Weight % | CAS # | EINECS# / ELINCS# | Formula | Molecular Weight |
|----------------------|----------|-----------|----------------------|-------------------------------|---------------------|
| Hydrogen Peroxide | 30 | 7722-84-1 | 231-765-0 | H ₂ O ₂ | 34.01 g/mol |
| Water | Balance | 7732-18-5 | 231-791-2 | H ₂ O | 18.00 g/mol |

4. FIRST-AID MEASURES

| Eyes | In case of eye contact, rinse with plenty of water and seek medical attention immediately. |
|------------|---|
| Inhalation | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not |
| | breathing, give artificial respiration. Get medical attention. |
| Skin | Immediately flush with plenty of water for at least 15 minutes while removing contaminated |
| | clothing and wash using soap. Get medical attention immediately. |
| Ingestion | Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If |
| | conscious, wash out mouth with water. Get medical attention immediately. |

5. FIREFIGHTING MEASURES

| Suitable (and unsuitable) extinguishing media | Product is not flammable. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use flooding quantities of water to cool | |
|--|---|--|
| | containers. | |

| Special protective equipment | Wear self-contained, approved breathing apparatus and full protective | |
|--|---|--|
| and precautions for firefighters | ters clothing, including eye protection and boots. | |
| Specific hazards arising from Product components will burn producing oxygen. (See also St | | |
| the chemical | Reactivity section). | |

6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures | See section 8 for recommendations on the use of personal protective equipment. |
|---|---|
| Environmental precautions | Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements. |
| Methods and materials for containment and cleaning up | Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations. |

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Isolate from combustible material. Store in the dark. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls:

| Component | Exposure Limits | Basis | Entity |
|-------------------|--------------------------------|-------|--------|
| Hydrogen Peroxide | 1 ppm 1.4 mg/m ³ | TLV | ACGIH |
| | 1 ppm 1.4 mg/m ³ | PEL | OSHA |
| | 1 ppm 1.4 mg/m ³ | REL | NIOSH |

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels CEIL: Ceiling

Personal Protection

| Eyes | Wear chemical safety glasses with a face shield for splash protection. |
|------------|---|
| Inhalation | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator. |
| Skin | Wear neoprene or nitrile gloves, apron or lab coat. |
| Other | Not Available |

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance (physical state, color, etc.) | Clear, colorless liquid |
|---|-----------------------------|
| Odor | No Odor |
| Odor threshold | Not Applicable |
| pH | Not Available |
| Melting point/freezing point | Not Available |
| Initial boiling point and boiling range | Not Available |
| Flash point | Not Flammable |
| Evaporation rate | Not Available |
| Flammability (solid, gas) | Not Flammable |
| Upper/lower flammability or explosive limit | Not Explosive |
| Vapor pressure | Not Available |
| Vapor density | Not Available |
| Relative density | Not Available |
| Solubility (ies) | Completely soluble in water |
| Partition coefficient: n-octanol/water | Not Available |
| Auto-ignition temperature | Not Applicable |
| Decomposition temperature | Not Available |

10. STABILITY AND REACTIVITY

| Chemical Stability | Stable |
|------------------------------------|--|
| Possibility of Hazardous Reactions | Will not occur. |
| Conditions to Avoid | Store out of direct light |
| Incompatible Materials | Brass, Copper, Powdered metals, Iron, Iron and iron salts, |
| | combustible materials |
| Hazardous Decomposition Products | Not Available |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

| Skin | LD50 Dermal – rat – 4060 mg/kg |
|-------------|--|
| Eyes | Not Available |
| Respiratory | LC50 Vapor – rat – 2000 mg/m – 4 hours |
| Ingestion | LD50 Oral – mouse – 2000 mg/kg |

Carcinogenicity

| IARC | 3-Group 3: Not classifiable as to its carcinogenicity to humans (hydrogen peroxide). |
|-------|--|
| ACGIH | A3: Confirmed animal carcinogen with unknown relevance to humans (hydrogen peroxide). |
| NTP | No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |

| OSHA | No components of this product present at levels greater than or equal to 0.1% is identified |
|------|---|
| | as a carcinogen or potential carcinogen by OSHA. |

Signs & Symptoms of Exposure

| Skin | Redness, burning, itching and pain. |
|-------------|---|
| Eyes | Eye burns, pain, watering eyes. |
| Respiratory | Coughing, shortness of breath, burning, choking, coughing, wheezing, laryngitis, headache |
| | or nausea. |
| Ingestion | Causes irritation and pain. |
| | |

| Chronic Toxicity | Not Available |
|--------------------------------|---------------|
| Teratogenicity | Not Available |
| Mutagenicity | Not Available |
| Embryotoxicity | Not Available |
| Specific Target Organ Toxicity | Not Available |

12. ECOLOGICAL INFORMATION

| Ecotoxicity | |
|----------------------|---------------|
| Aquatic Vertebrate | Not Available |
| Aquatic Invertebrate | Not Available |
| Terrestrial | Not Available |
| | |

| Persistence and Degradability | Not Available |
|----------------------------------|---------------|
| Bioaccumulative Potential | Not Available |
| Mobility in Soil | Not Available |
| PBT and vPvB Assessment | Not Available |
| Other Adverse Effects | Not Available |

13. DISPOSAL CONSIDERATIONS

| Waste Residues | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste products or residues. |
|----------------|---|
| Product | Users should review their operations in terms of the applicable federal/national or |
| Containers | local regulations and consult with appropriate regulatory agencies if necessary |
| | before disposing of waste product container. |

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

| US DOT | UN2014, Hydrogen peroxide, aqueous solutions 5.1, (8), pg II |
|------------------|--|
| TDG | UN2014, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS 5.1, (8), PG II |
| IMDG | UN2014, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS 5.1, (8), PG II |
| Marine Pollutant | No |
| IATA/ICAO | UN2014, Hydrogen peroxide, aqueous solutions 5.1, (8), pg II |

15. REGULATORY INFORMATION

| TSCA Inventory Status | All ingredients are listed on the TSCA inventory. | |
|---------------------------|--|--|
| DSCL (EEC) | All ingredients are listed on the DSCL inventory. | |
| California Proposition 65 | Not Listed | |
| SARA 302 | Listed: Hydrogen Peroxide | |
| SARA 304 | Listed: Hydrogen Peroxide | |
| SARA 311 | Hydrogen Peroxide | |
| SARA 312 | Hydrogen Peroxide | |
| SARA 313 | Listed: Hydrogen Peroxide | |
| WHMIS Canada | Class C: Oxidizing Material | |
| | Class D-2B: Toxic Material Causing Other Toxic Effects | |

16. OTHER INFORMATION

| Revision | Date |
|------------|------------|
| Revision 1 | 01/08/2013 |
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