

# Material Safety Data Sheet

HYROGEN PEROXIDE 35% FOOD GRADE

MSDS No. 125

Date of Preparation: 06/2009

Revision:

## Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** HYDROGEN PEROXIDE 35% FOOD GRADE

**Chemical Formula:** H<sub>2</sub>O<sub>2</sub>

**EINECS Number:** 231-765-0

**ACX Number:** X1002204-7

**Other Designations:** N/A

**Wedor Part Number:** H2004

| HMIS    |   |
|---------|---|
| H       | 2 |
| F       | 0 |
| R       | 3 |
| PPE†    |   |
| †Sec. 8 |   |

**General Use:** At varying concentrations used for bleaching, as an antiseptic, or an oxidizing agent in food, a neutralization agent in wine distillation; a seed disinfectant, as an all fabric bleach, as a substitute for chlorine water, as well as in sewage treatment, water treatment, and as a food additive.

**Manufacturer:** Wedor Corporation, 1907 S. 89<sup>th</sup> Street, West Allis, WI 53227, Phone (414)329-9041, Fax (414)329-9043, Emergency Phone Number 1-800-424-9300.

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless liquid. Corrosive. Other Acute Effects: difficulty breathing, salivation, giddiness, muscle weakness, tremors/numbness of extremities, pulmonary edema, possilbe sight loss.  
Strong Oxidizer.

## Section 2 - Composition / Information on Ingredients

| Ingredient Name   | CAS Number | % wt or % vol. |
|-------------------|------------|----------------|
| Hydrogen Peroxide | 7722-84-1  | 35%            |
| Water             | 7732-18-5  | 65%            |

### Trace Impurities:

| Ingredient        | OSHA PEL |             | ACGIH TLV |             | NIOSH REL |             | NIOSH IDLH |
|-------------------|----------|-------------|-----------|-------------|-----------|-------------|------------|
|                   | TWA      | STEL        | TWA       | STEL        | TWA       | STEL        |            |
| Hydrogen Peroxide | 1 ppm    | None Estab. | 1 ppm     | None Estab. | 1 ppm     | None Estab. | 75 ppm     |

**Toxicological Information:** Not available. Refer to individual constituents.

See RTECS MX 0899500, for additional data.

## Section 3 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance and Odor:** Clear, colorless, water-like liquid, slight odor. Oxygen bubbles may be dispersed in liquid.

**Odor Threshold:** N/A

**Vapor Pressure:** less than 1

**Vapor Density (Air=1):** Not Applicable

**Formula Weight:** 9.42 lbs/gal.

**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** 1.13

**pH:** Not Available

**Water Solubility:** Complete

**Other Solubility's:** N/A

**Boiling Point:** 107

**Freezing/Melting Point:** -33

**Viscosity:** N/A

**Refractive Index:** N/A

**Surface Tension:** N/A

**% Volatile:** N/A

**Evaporation Rate:** Not Available

**Section 4 - Fire-Fighting Measures**

**Flash Point:** Non Flammable  
**Flash Point Method:** N/A  
**Burning Rate:** N/A  
**Autoignition Temperature:** N/A  
**LEL:** 40% v/v  
**UEL:** 100% v/v



**Flammability Classification:** Non-Flammable  
**Extinguishing Media:** Flooding quantities of water only in the early stages of a fire. Water spray or fog. DO NOT use halogenated Fire extinguishing agents.  
**General Fire Hazards/Hazardous Combustion Products:** Non combustible liquid. Will not burn but increases intensity of fire. Contact with readily oxidizable organic material may cause ignition/fire. Heating may cause expansion or decomposition, leading to violent rupture of containers.  
**Fire-Fighting Instructions:** Alert fire department and tell them location and nature of hazard. May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water ways. Use fire fighting procedures suitable for surrounding area. Cool fire exposed containers with water spray from a protected location. Do not approach containers suspected to be hot. If safe to do so, remove containers from path of fire.  
**Fire Incompatibility:** Avoid contact with organic materials/compounds, particularly finely divided combustible materials, as ignition may result. Violent catalytic decomposition will occur in contact with certain metals such as iron, copper, chromium, brass, bronze, lead, silver, manganese or their salts.  
**Fire-Fighting Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

**Section 5 - Stability and Reactivity**

**Stability:** Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous. Presence of heat source and direct sunlight. Solutions of hydrogen peroxide decompose slowly releasing oxygen. Heat or contaminants will accelerate decomposition. Containers may be pressurized. Hydrogen peroxide is decomposed by alkalis and even ordinary dust or rust.  
**Polymerization:** Hazardous polymerization cannot occur.  
**Chemical Incompatibilities:** Rotate all stock to prevent aging. Use on FIFO (First In-First Out) basis. Segregate from combustible materials, particularly finely divided combustible materials and reducing agents  
**Hazardous Decomposition Products:** Oxygen, The release of other hazardous decomposition products is possible.

**Section 6 - Health Hazard Information**

**Potential Health Effects**

**Primary Entry Routes:** Eyes, Skin & Inhalation.  
**Target Organs:** Eyes, skin, respiratory system, central nervous system (CNS).  
**Acute Effects**  
**Inhalation:** The vapor/mist is highly discomforting and corrosive to the upper respiratory tract. Inhalation of excessive levels of mist may result in headache, dizziness, vomiting, diarrhea, irritability, insomnia and, in extreme cases, pulmonary edema.  
**Eye:** The liquid is discomforting and is highly corrosive to the eyes and is capable of causing severe damage with loss of sight. Reactions may not occur on exposure but response may be delayed with symptoms only appearing many hours later and may cause severe ulceration.  
**Skin:** Skin contact will result in rapid drying and bleaching, leading to chemical burns on prolonged contact. Bare unprotected skin should not be exposed to this material. The material may accentuate any pre-existing skin condition.  
**Ingestion:** The liquid is highly corrosive if swallowed and is capable of causing burns to mouth, throat, esophagus, with extreme discomfort, pain. Ingestion may result in nausea, abdominal irritation, pain, vomiting, and possible internal bleeding. Released oxygen gas may cause distension, pain, even severe organ damage.  
**Carcinogenicity:** NTP - Not listed; IARC - Group 3, Not classifiable as to carcinogenicity to humans; OSHA - Not listed; NIOSH - Not listed; ACGIH - Class A3, Animal carcinogen; EPA - Not listed; MAK - Not listed.  
**Chronic Effects:** Severe systemic poisoning can cause tremors and numbness of the extremities, shock, convulsions, and unconsciousness.

**Emergency and First Aid Procedures**

**Inhalation:** Remove to fresh air. Lay patient down. Keep warm and rested. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor.

**Eye Contact:** Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**Skin Contact:** Immediately flush body and clothes with large amounts of water, using safety shower if available.

Quickly remove all contaminated clothing, including footwear. Wash affected areas with water (and soap if available) for at least 15 minutes. Transport to hospital or doctor.

**Ingestion:** Rinse mouth out with plenty of water. Contact a Poison Control Center. If swallowed, do NOT induce vomiting. Give a glass of water.

*After first aid, get appropriate in-plant, paramedic, or community medical support.*

**Note to Physicians:** Treat symptomatically.

**Special Precautions/Procedures:** Wear safety goggles and gloves while using.

## Section 7 - Spill, Leak, and Disposal Procedures

### Spill /Leak Procedures:

**Small Spills:** Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety glasses. Remove all ignition sources. Small quantities may be discharged to sewer with a large excess of water. Wipe up.

**Large Spills:** Clear area of personnel and move upwind. Alert fire department and tell them location and nature of hazard.

May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water ways. No smoking, bare lights or ignition sources.

Increase ventilation. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labeled containers for recycling. DO NOT return unused product to containers. Absorb remaining product with sand, earth or vermiculite. Collect residues and place in labeled plastic containers with vented lids.

Wash spill area with large quantities of water.

After clean up operations, decontaminate and launder all protective clothing and equipment before storing and reusing.

If contamination of drains or waterways occurs, advise emergency services.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable federal, state, and local regulations.

**Disposal Regulatory Requirements:** N/A

**Container Cleaning and Disposal:** N/A

### Ecological Information:

### EPA Regulations:

RCRA Hazardous Waste Number: **Not listed** (40 CFR 261.33)

RCRA Hazardous Waste Classification: **Not classified**

CERCLA Hazardous Substance (40 CFR 302.4) **unlisted** specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ), N/A

SARA 311/312 Codes: N/A

SARA Toxic Chemical (40 CFR 372.65): **Not listed**

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): **Hydrogen Peroxide 35%**, Threshold Planning Quantity (TPQ): 1000 lbs.

### OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): **Not listed**

OSHA Specifically Regulated Substance: **Not listed**

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** Use in a well-ventilated area.

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

### Administrative Controls:

**Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.

*Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**Protective Clothing/Equipment:** Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**Other:** Do not allow clothing wet with material to stay in contact with skin. Overalls, PVC apron and impervious Apron. Eyewash unit. Ensure there is ready access to a safety shower.

**Glove Selection Index:**

NEOPRENE..... Best selection

NATURAL RUBBER..... Satisfactory; may degrade after 4 hours continuous immersion

**Section 9 - Special Precautions and Comments**

**Handling Precautions:** Wear chemical safety goggles & gloves while handling.

**Storage Requirements:** Store in a cool, dry place. Close container tightly when not in use with special vent cap installed.

**DOT Transportation Data (49 CFR 172.101):**

**Shipping Name:** Hydrogen Peroxide, Aqueous Solutions

**Shipping Symbols:** Oxidizer, Corrosive

**Hazard Class:** 5.1 - Oxidizer

**ID No.:** UN2014

**Packing Group:** II – Medium Danger

**Label Codes:** 5.1 – Oxidizer, 8-Corrosive, D.O.T.: 5.1 (8).

**Special Provisions (172.102):** A2, A3, A6, B53, IB2, IP5, T7, TP2, TP6, TP24, TP37

**Packaging Authorizations**

- a) **Exceptions:** None
- b) **Non-bulk Packaging:** 202
- c) **Bulk Packaging:** 243

**Quantity Limitations**

- a) **Passenger, Aircraft, or Railcar:** 1 L
- b) **Cargo Aircraft Only:** 5 L

**Vessel Stowage Requirements**

- a) **Vessel Stowage:** D
- b) **Other:** None

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**Revision Notes:**

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