

# Material Safety Data

**Product:** HYDROGEN PEROXIDE 50% AND 35%  
**Emergency** (036) 251893 - 24 HOURS  
**Telephone Nos.:** 251894 - Office Hours  
251895 - " "

## Product Information

**Synonyms:** Hydrogen Peroxide 50% and  
Hydrogen Peroxide 35%  
**Formula:** H<sub>2</sub>O<sub>2</sub>  
**Chemical Family:** Peroxygen  
**Product Uses :** It is a versatile chemical and is used extensively as an oxidising agent for textile , pulp & paper , leather-hides , electronics , food , environmental , cosmetics and other applications.

## Precautionary Information

**Health:** Liquid is corrosive to the eye and skin, and direct eye contact may cause irreversible tissue damage, including blindness. Inhalation of mist or vapor will cause severe irritation of lungs/throat and nose that usually subsides after exposure ceases. Swallowing may produce corrosion (burning) of the gastrointestinal tract that may be life-threatening.

**Physical:** Initiates combustion in other materials by causing fire through release of oxygen.

## Ingredients

	H <sub>2</sub> O <sub>2</sub> -50%	H <sub>2</sub> O <sub>2</sub> -35%
<b>Material/Component:</b>	Hydrogen - Peroxide	
Percent :	50%	35%
<b>Hazard Class:</b>	Oxidizer	Oxidizer
<b>Material/Component :</b>	Water	Water
Percent :	50%	65%

## Physical Data

	H <sub>2</sub> O <sub>2</sub> -50%	H <sub>2</sub> O <sub>2</sub> -35%
<b>Boiling Point:</b>	114 C(237 F)	108 C (226 F)
<b>Appearance and state:</b>	Clear, colorless	liquid
<b>Odor:</b>		Odorless
<b>Specific Gravity @ 20 C/ 4 C:</b>	1.19	1.13
<b>Solubility in water % by Weight:</b>	100	100
<b>pH (as is) :</b>	1.0 - 3.0	2.0 - 3.0

## Fire, Explosion and Reactivity Data

**Flash Point:** Non - Flammable  
**Autoignition** Non - Combustible  
**Temperature:**  
**Extinguishing Media:** Water / Water Fog  
**Special Fire Fighting Procedures :** Any tank or container surrounded by fire should be flooded with water for cooling. If H<sub>2</sub>O<sub>2</sub> is leaking, wear full protective clothing and certified, self-contained breathing apparatus.  
**Degree of Fire and Explosion Hazard:** Decomposition of Hydrogen Peroxide releases oxygen which may intensify fire. Hydrogen Peroxide itself is non-combustible.  
**Conditions To Avoid:** Excessive heat / contamination of any kind.  
**Major Contaminants that contribute to instability:** Heavy metals , Reducing-agents, Rust , Dirt.  
**Incompatibility :** Iron and other heavy metals, Galvanized iron, Copper, Copper alloys, Rust, Dirt, Organics, Wood , Paper or Other combustibles.

## Routes of Exposure

**Eye Contact:** Extremely irritating corrosive (rabbit)  
**Skin Contact:** Mildly irritating (rabbit).  
**Skin Absorption:** No significant hazard(rabbit).  
**Inhalation:** TLV = 1 ppm TWA(PEL=1ppm TWA 90% H<sub>2</sub>O<sub>2</sub>).  
**Ingestion:- H<sub>2</sub>O<sub>2</sub> - 50%:** Moderately hazardous(rat). LD 50 is between 225 to 1200 mg/kg.  
**H<sub>2</sub>O<sub>2</sub> - 35%:** Moderately hazardous(rat). LD 50=1193 mg/kg(male rat)

## Effects of Over Exposure

**H<sub>2</sub>O<sub>2</sub> - 50% & 35%:** Severe irritant to eyes , nose, throat, lungs and gastrointestinal tract. May cause irreversible tissue damage to the eyes.

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## Emergency And First Aid Procedures

- Eyes:** Immediately flush with large amount of water for at least 15 minutes, lifting upper and lower lids intermittently. Check immediately with eye specialist.
- Skin:** Wash with large amount of water. If irritation persists, obtain medical attention.
- Inhalation :** Remove to fresh air. Call a doctor.
- Ingestion :** If swallowed, drink plenty of water immediately to dilute. Do not induce vomiting. See a doctor .
- Decontamination Procedure:** Wash area with large amounts of water.
- Notes to Doctor:** Hydrogen Peroxide, at this concentration, is a strong oxidizer. Direct contact with eyes is sufficiently likely to cause corneal damage, even if washed away immediately, so that careful ophthalmological evaluation is recommended. Because of the likelihood of corrosive effects on the gastro-intestinal tract after ingestion, and the unlikelyhood 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 naso - gastric or orogastric tube may be required for the reduction of severe distention due to gas formation .

### Special Protection

- Ventilation:** Provide general and local exhaust ventilation as required.

### Recommended Personnel Protective Equipment

- Respiratory:** For severe vapor or mist (concentration in excess of 10 ppm) uses certified self - contained breathing apparatus.
- Eyes:** Cup type chemical goggles and/or full face mask.
- Gloves:** Liquid - proof rubber or neoprene gloves
- Footwear:** Rubber or neoprene footwear.

### Emergency Accident

- Precautions and Procedure:** Keep people away. Wear full protective clothing. Use water only for fire.

## Storage and Handling

Water cup type chemical safety goggles, polyester or acrylic full cover clothing and rubber or neoprene gloves and shoes. Avoid excessive heat. Avoid contamination of any kind. Contamination may cause decomposition and generation of oxygen gas which could result in high pressure and possible container rupture. Hydrogen peroxide should not be stored in an unvented container.

Never return unused hydrogen peroxide to original container. Empty drums should be rinsed in water before discarding. Utensils used for handling hydrogen peroxide should be made only of the following compatible materials: glass, stainless steel, aluminum or plastic. Storage should conform to conditions described in NFPA bulletin 43A (code for the storage of liquid and solid oxidizing materials). NFPA hazard class II oxidizer.

## Disposal, Spill or Procedures

- Procedure for Release of spill:** Dilute with a large volume of water. Hold in a pond or diked area until the H<sub>2</sub>O<sub>2</sub> decomposes. Dispose of according to method outlined below for waste disposal.
- Waste Disposal Method:** An acceptable method of disposal is to dilute with a large amount of water and allow the hydrogen peroxide to decompose, followed by discharge into a suitable treatment system in accordance with all local and state environmental laws, rules, regulations, standards and other requirements, because acceptable method of disposal may vary by location and because regulatory requirements may change, the appropriate regulatory agencies should be contacted prior to disposal.

### Transportation

- Precautions** Drums should be stacked properly in transit, make sure to keep drums in upright position.
- UN Number:** 2014

### Type of Packages

Polyethylene containers, meeting specifications according to USA DOT code 34.

### Precautionary Labels:



The information and suggestions contained herein are given purely as a guide. no responsibility either for the results derived from their adoption or for possible positions in apparent contrast with existing patent rights.