# **HYDROGEN PEROXIDE**

CAS Number: 7722-84-1



Other Names: Oxydol; Perhydrol; Hydrogen dioxide; Hydroperoxide; Superoxol

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

## **PRODUCT INTRODUCTION**

Hydrogen peroxide is an inorganic peroxide consisting of two hydroxy groups joined by a covalent oxygen-oxygen single bond. Hydrogen peroxide is a colorless liquid at room temperature with a bitter taste. Small amounts of gaseous hydrogen peroxide occur naturally in the air. Hydrogen peroxide is unstable, decomposing readily to oxygen and water with release of heat.

### PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear and Colorless Liquid
Concentration % w/w, Min	50.82
Specific Gravity at 25°C	1.1949
Rate of decomposition (at 96°C for 16H) % w/w, Max	4.87
Acidity (as H <sub>2</sub> SO <sub>4</sub> ), g/100 mL, Max	0.040

## APPLICATIONS

- Hydrogen peroxide is an important commercial chemical. It is used as a bleaching or deodorizing agent in foods, textiles and personal care items.
- The second major industrial application is the manufacture of sodium percarbonate and sodium perborate, which are used as mild bleaches in laundry detergents.
- Highly purified hydrogen peroxide is used in wet chemical processes during the manufacture of silicon semiconductor devices to clean silicon wafers and to remove photoresist layers.
- Some horticulturalists and users of hydroponics advocate the use of weak hydrogen peroxide solution in watering solutions.

#### **PACKAGING OPTIONS**

Drums