



Technical Data Sheet

Food Grade Hydrogen Peroxide 35%, 50%

Introduction

Food Grade hydrogen peroxide (H_2O_2) is formulated to meet Food Chemical Codex specifications. It is used in food processing as regulated by the Food and Drug Administration in 21 CFR 184.1366, Hydrogen Peroxide. Food Grade hydrogen peroxide is also used in non-food applications where particularly pure hydrogen peroxide is required.

Applications

Approved uses of Food Grade hydrogen peroxide include bleaching of tripe, instant tea and cheese whey. Hydrogen peroxide is an effective antimicrobial agent in cheese making and in the manufacture of starch. It is also approved as a sterilizing agent for aseptic packaging.

Availability

Food Grade hydrogen peroxide is sold in concentrations of 35% and 50% and is available in bulk truck or railcar quantities from our Deer Park, Texas and Longview, Washington plants. Product is also available in truckload drum shipments from Solvay Intertox, Inc. Less than truckload shipments of hydrogen peroxide are available from Solvay Intertox distributors. For more information, or to place an order, please contact Solvay Intertox at 1-800-INTEROX, 713-468-3769 or 713-525-6500.

Physical Properties

Hydrogen peroxide is a clear, colorless, slightly viscous liquid. It is slightly denser than water but is miscible with water in all proportions. Hydrogen peroxide decomposes exothermally to water and oxygen with no toxic residues. The decomposition is normally slow (<1%/yr) with no temperature rise but is accelerated by heat and decomposition catalysts, such as transition metals and their compounds, strong acids and strong alkalis. For additional information, please refer to our brochure, *Hydrogen Peroxide Safety and Handling*.

Typical Analysis	35%	50%
Concentration in water, % w/w	35.0-36.0	50.0-51.0
Apparent pH	2.5-4.2	2.0-3.5
Phosphate as PO_4 , mg/L	50 max	50 max
Residue on Evap., mg/kg	60 max	60 max
Acidity as H_2SO_4 , mg/L	300 max	300 max
Heavy Metals as Pb, mg/L	10 max	10 max
Iron, mg/L	0.5 max	0.5 max
Appearance	Clear, colorless liquid	Clear, colorless liquid

Storage and Handling

- Store hydrogen peroxide in the original vented container, upright, in a cool, ventilated area where it is protected from damage or in bulk storage tanks made from approved alloys of aluminum or stainless steel.
- Do not store other chemicals, fuels, or combustible materials near hydrogen peroxide.
- Never return unused hydrogen peroxide to the storage container.
- When empty, rinse all hydrogen peroxide containers thoroughly with clean water before discarding.
- Use only approved materials for pumps, piping and hoses.

Safety

- Persons working with hydrogen peroxide should be familiar with personal protective equipment, first aid measures and the proper safety and handling procedures. Consult the Material Safety Data Sheet (MSDS) for appropriate information.
- Prevent accidental decomposition by keeping the product free of contaminants.
- Prevent fires by avoiding accidental spills. Water is the preferred method for extinguishing fires in which hydrogen peroxide is present.
- Spills and leaks should be contained, diluted with copious amounts of water, and disposed of in compliance with local regulations.
- Hydrogen peroxide storage or handling areas should be equipped with a safety shower, an eyewash station, and a water hose.

First Aid:

In case of product splashing into the eyes and face, treat eyes first.

- Eye contact:** Flush eyes immediately with water for at least 15 minutes. Call a physician.
- Skin contact:** Immediately flush skin with water while removing contaminated clothing and shoes. Call a physician if irritation persists.
- Inhalation:** Remove the victim from the contaminated area to fresh air. Call a physician in case of respiratory symptoms.
- Ingestion:** Consult with a physician immediately in all cases. DO NOT induce vomiting. If victim is conscious, rinse mouth and give fresh water

Danger: Hydrogen Peroxide solutions are strong oxidizers and corrosive to the eyes, mucous membranes and skin. Consult the MSDS for the appropriate Personal Protective Equipment to wear when handling hydrogen peroxide. In case of contact with the eyes, skin or clothing, flush with large amounts of water for 15 minutes. In case of ingestion, sit upright, drink large quantities of water to dilute the stomach contents and seek immediate medical attention. Product in contact with combustible materials may cause fires.

Before using, read Material Safety Data Sheet (MSDS) for this chemical.

Solvay Interlox, Inc.
24 hour Emergency Phone Number - 281/479-2826

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