

INTEROX[®] Hydrogen Peroxide

INTEROX[®] Technical Grade, 35%, 50%, 70% Technical Data Sheet

Introduction

INTEROX[®] Technical Grade hydrogen peroxide (H₂O₂) is usually the most economical grade for industrial applications in which inorganic stabilizers are acceptable.

Applications

INTEROX[®] Technical Grade hydrogen peroxide is used in the pulp and paper industry in bleaching chemical and mechanical pulp and in wastepaper recycling. In the textile industry, it is a bleach for natural and synthetic fibers and a desizing agent. It also safely detoxifies many industrial wastes, including phenolics and reduced sulfur compounds. INTEROX[®] Technical Grade hydrogen peroxide is also used in the extraction and finishing of metals.

Availability

INTEROX[®] Technical Grade hydrogen peroxide is sold in concentrations of 35%, 50% and 70% and is available in bulk truck or railcar quantities from Solvay Chemicals's Deer Park, Texas and Longview, Washington plants. INTEROX[®] Technical Grade hydrogen peroxide is also available in concentrations of 35% and 50% in truckload drum shipments from Solvay Chemicals, Inc. Less than truckload shipments of hydrogen peroxide are available from Solvay Chemicals distributors. For more information, or to place an order, please contact Solvay Chemicals at 1-800-SOLVAY-C or 800-765-8292.

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%	70%
Concentration in water, % w/w	35.0 - 36.0	50.0-51.0	70.0 - 71.0
Apparent pH	1.7 - 3.7	1.0 - 3.0	-0.5 - 1.6
Appearance	Clear, colorless liquid	Clear, colorless liquid	Clear, colorless liquid



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Interox, Fluorides & Minerals

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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 peroxide containers thoroughly with clean water before discarding.
- Use only approved material 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.

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

Solvay Chemicals, Inc.
24 hour Emergency Phone Number - 800-424-9300 (CHEMTREC[®])

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