**INTRODUCTION**

INTEROX® Chemical Grade hydrogen peroxide (H₂O₂) is a versatile oxidant for the chemical process industries. INTEROX® Chemical Grade hydrogen peroxide is formulated with a special stabilizer package that replaces the tin-based stabilizer with an organophosphonate stabilizer for improved reaction efficiencies and cleaner reaction products. It is the reagent of choice for olefin epoxidations/hydroxylations, carbon oxidation (side chains, alcohols, and aldehydes), sulfur/nitrogen oxidations, and closed loop halogenation reactions.

**APPLICATIONS**

INTEROX® Chemical Grade hydrogen peroxide, or the peracids and catalytic systems derived from it, is used extensively in the manufacture of epoxy plasticizers, pesticides, rubber chemicals, dyestuffs, specialty surfactants, pharmaceuticals, and flame retardants. Additionally, INTEROX® Chemical Grade can be used in stainless steel pickling baths for NOx suppression.

**AVAILABILITY**

INTEROX® Chemical Grade hydrogen peroxide is sold in concentrations of 35%, 50%, 60% and 70% and is available in bulk truck or railcar quantities from our manufacturing sites located at La Porte, Texas and Longview, Washington. For more information, or to place an order, please contact Solvay Chemicals at 1-800-443-2785.

**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% per year) 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, which can be found at [www.solvaychemicals.us](http://www.solvaychemicals.us).

<table>
<thead>
<tr>
<th>Specifications</th>
<th>35%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration in water, % w/w</td>
<td>35.0 – 36.0</td>
<td>50.0 – 51.0</td>
<td>60.0 – 61.0</td>
<td>70.0 – 71.0</td>
</tr>
<tr>
<td>Apparent pH</td>
<td>1.2 – 2.2</td>
<td>0.3 – 1.7</td>
<td>0.2 – 1.2</td>
<td>-0.7 – 0.7</td>
</tr>
</tbody>
</table>

**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 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 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 Safety Data Sheet (SDS) for appropriate information, available at www.solvaychemicals.us.

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 SDS 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 Safety Data Sheet (SDS) for this chemical.

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

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