Mallinckrodt®

HYDROGEN PEROXIDE SOLUTION, 30%

Material Safety Data Sheet

Emergency Telephone Number
Mallinckrodt Inc. 314-982-5000
Science Products Division
P.O. Box M
Paris, Kentucky 40361

Effective Date: 10-18-85

PRODUCT IDENTIFICATION:

Synonyms: Peroxide; 100 volume peroxide

Formula CAS No.: 7722-84-1 Molecular Weight: 34.01

Hazardous Ingredients: Chemical Formula: H_2O_2
None.

PRECAUTIONARY MEASURES

DANGER! STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. CAUSES SEVERE BURNS. HARMFUL IF SWALLOWED OR INHALED.

Do not get in eyes, on skin, or on clothing.
Avoid breathing mist.
Keep from contact with clothing and other combustible materials.
Do not store near combustible materials.
Use with adequate ventilation.
Wash thoroughly after handling.

EMERGENCY/FIRST AID

In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. For eyes, get medical attention.
If swallowed, give water or milk to drink. Get medical attention immediately. Never give anything by mouth to an unconscious person.
If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.
In all cases call a physician.
SEE SECTION 5.

DOT Hazard Class: Oxidizer

Physical Data SECTION 1

Appearance: Clear, colorless liquid.

Odor: Acrid odor.

Solubility: Infinitely soluble in water.

Boiling Point: 108°C (226°F) Vapor Density (Air=1):(Air=1) 1.17

Melting Point: -25°C (-13°F) Vapor Pressure (mm Hg):25 at 30°C (86°F)

Specific Gravity: 1.11 Evaporation Rate:(BuAc=1): <1

Fire and Explosion Information SECTION 2

Fire: Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Increases the flammability of combustible, organic and readily oxidizable materials.

Explosion: Contact with oxidizable substances may cause extremely violent combustion.

Drying of concentrated hydrogen peroxide on clothing or other combustible materials may cause fire or explosion.

Fire Extinguishing Media: Water spray may be used to extinguish surrounding fire and cool exposed containers. Water spray will also reduce fume and irritant gases.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Reactivity Data SECTION 3

Stability: Unstable. Unstable with heat, may result in dangerous pressures. A strong oxidizer, reacts violently upon contact with many organic substances, particularly textile and paper.

Hazardous Decomposition Products: Decomposes to water and oxygen with rapid heat release. Use vented containers. The solution can decompose violently upon heating.

Hazardous Polymerization: This substance does not polymerize.

Incompatibilities: Heat, reducing agents, organic materials, dirt, alkalies, rust, and many metals. Spontaneous combustion may occur on standing in contact with readily flammable materials.

Leak/Spill Disposal Information SECTION 4

CAUTION! Caustic material. Causes fires with organic material. Ventilate area of leak or spill. Clean-up personnel require protective clothing. Contain and recover liquid when possible.

Larger Spills: absorb with vermiculite, dry sand, earth, or similar material for disposal as hazardous waste in a RCRA approved facility.

Do Not Flush To Sewer. This oxidizing material can increase the flammability of adjacent combustible materials.

Ensure compliance with local, state and federal regulations.

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Health Hazard Information SECTION 3

Exposure/Health Effects

Inhalation: Vapors are corrosive and irritating to the respiratory tract. Inhalation of mist may burn the mucous membrane of the nose and throat.

Ingestion: Corrosive and irritating to the mouth, throat, and abdomen. Large doses may cause symptoms of abdominal pain, vomiting, and diarrhea as well as blistering or tissue destruction.

Skin Contact: Irritating in contact with the skin. Symptoms include discoloration of skin and pain.

Eye Contact: Vapors are very corrosive and irritating to the eyes. Symptoms include pain, redness and blurred vision. Splashes may cause tissue destruction.

Chronic Exposure: No information found.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

FIRST AID

Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion: If swallowed, give water or milk to drink. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Skin Exposure: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Call a physician immediately.

Eye Exposure: Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

TOXICITY DATA (RTECS, 1982)

o LD50/LC50 information found relating to normal routes of occupational exposure.
umorigenic data cited.

Occupational Control Measures SECTION 6

Airborne Exposure Limits:
-OSHA Permissible Exposure Limit (PEL):
1 ppm (TWA)
-ACGIH Threshold Limit Value (TLV)
1 ppm (TWA) 2 ppm (STEL)

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators (NIOSH Approved) If the TLV is exceeded a full facepiece chemical cartridge respirator may be worn, in general, up to 100 times the TLV or the maximum use concentration specified by the respirator supplier, whichever is less. Alternatively, a supplied air full facepiece respirator or airlined hood may be worn.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material.

Maintain eye wash fountain and quick-drench facilities in work area.

Storage and Special Information SECTION 7

Store in a cool, well-ventilated dark area separated from combustible substances, reducing agents, strong bases, organics. Suggest rotation of stock. Containers must be vented, but check periodically for bulging containers which can burst from pressure. Protect containers from physical damage and contamination. Contamination from any source (dust, metals) may cause rapid decomposition with generation of large quantities of oxygen gas and high pressures. Rinse empty containers thoroughly with clean water.