



Kitter Corporation

Material Safety Data Sheet

50% HYDROGEN PEROXIDE Solution

Section 1: Identification

Product Name: 50% HYDROGEN PEROXIDE Solution
Manufacturer's Name: Kitter Corporation
Address: 100 S. Cleveland (P.O. Box 9680) Amarillo, Texas 79105
Emergency Phone Number: Chem-Tel 1-800-255-3924
Product Stewardship: 806-376-1448
Date Prepared: December 7, 2003

Section 2: Composition / Information on Ingredients

CHEMICAL	C.A.S. NUMBER	WEIGHT %
Water	7732-18-5	50
Hydrogen Peroxide	7722-84-1	50

OSHA Hazardous Components (29 CFR 1910.1200):

	OSHA PEL	ACGIH TLV
Hydrogen Peroxide (7722-84-1)	1 ppm	1 ppm

Section 3: Hazard Identification

Potential Health Effects:

Eyes: Contact with eyes causes severe eye burns. May cause blindness.
Skin: Prolonged or repeated contact with skin can cause severe irritation or burns characterized by a tingling sensation, redness, swelling and possible destruction of the epidermis with ulceration.
Ingestion: Swallowing may cause irritation, burns or perforation of the gastrointestinal tract. Symptoms of injury may include abdominal pain, nausea vomiting, diarrhea, bleeding or tissue ulceration.
Inhalation: May cause severe irritation of the eyes, nose and upper respiratory tract with cough, chest discomfort and in severe cases, pulmonary edema.

Section 4: First Aid Measures

Eye Contact: Immediately flush eyes with water for at least 15 minutes. Seek medical attention.
Skin Contact: Immediately flush skin with water and remove contaminated clothing and shoes. Do not reuse contaminated clothing.
Ingestion: Do not induce vomiting. If conscious and alert, give two glasses of water. Seek medical attention immediately.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Seek medical attention.

Section 5: Fire Fighting Measures

Flash Point & Method: None, PMCC Method
Flammable Limits: LEL - N/A UEL - N/A
Auto ignition Temperature: N/E
General Hazard: See Below

Fire Fighting Instructions: For small fires use water only; no dry chemical or carbon dioxide. To fight large fires involving hydrogen peroxide, flood fire area with water from a distance. Fires involving hydrogen peroxide should be fought upwind from the maximum distance possible. Emergency personnel should stay out of low areas. Firefighters should wear a full set of protective clothing and self-contained breathing apparatus for maximum protection.

Unusual Fire & Explosion Hazards: Vapors are an explosion and poison hazard indoors, outdoors, or in sewers. This substance may ignite other combustible materials such as wood, paper, oil, etc. Mixed with fuel they may react violently or even explode. Explosions can also be caused by friction, heat or contamination. Containers of hydrogen peroxide may explode in the heat of the fire and should be moved from the fire area if it is possible to do so safely.

Section 6: Accidental Release Measures

Spills or Leaks: Stop the leak, if possible. Ventilate the space involved. Flush with plenty of water. Combustible materials exposed to Hydrogen Peroxide should be rinsed immediately with large amounts of water. Residual Hydrogen Peroxide which is allowed to dry on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.
Consult a regulatory specialist to determine appropriate state or local reporting requirements.

Section 7: Handling & Storage

Storage Temperature: Ambient
Storage Pressure: Atmospheric
General: Store in a cool, dry, well-ventilated area in tightly sealed containers. Store separately from combustible materials such as wood, paper, oil, etc., organic materials such as alcohols, acetone, and other ketones; aldehydes and their anhydrides; glycerol, cotton (cellulose), metals including iron, copper, chromium, lead, silver, manganese, sodium potassium, magnesium, nickel, gold, platinum; metal alloys such as brass or bronze; metal oxides such as lead oxides, mercury oxides, or manganese dioxide; and many metal salts like potassium permanganate or sodium iodate; and mineral acids. Wash thoroughly after handling. Keep out of reach of children.

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Section 8: Exposure Control / Personal Protection

Engineering Controls: Use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.
Personal Protection:
Respiratory Protection: When airborne exposure limits are exceeded use NIOSH approved respiratory protection equipment, appropriate for the material and/or its components. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29CFR 1910.134.
Hand Protection: Butyl rubber, Neoprene, or Polyvinyl chloride gloves should be worn when handling this material.
Eye Protection: Goggles and full face shield. Have eye flushing equipment immediately available.
Other Recommendations: Wear chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if the skin is contaminated. Clean protective equipment before reuse. Provide safety shower at the location where skin contact can occur.

Section 9: Physical & Chemical Properties

Specific Gravity (H ₂ O=1)	1.196	Boiling Point	114°C (237°F)
Vapor Pressure (mmHg.)	18.3 @ 20°C	Melting Point	N/A
Vapor Density (AIR=1)	1.0	Solubility in Water	100%
Evaporation Rate (n-BuAc=1)	<1	pH	1.7

Appearance and Odor: Clear colorless liquid with a slightly sharp odor.

Section 10: Stability & Reactivity

General: This material is chemically stable under normal and anticipated storage and handling conditions.
Incompatible Materials: Contact with metals, metal ions, organics, wood, dust, and shavings, dry vegetables may cause decomposition.
Hazardous Decomposition: Material decomposes if contaminated, with the potential to produce a rupture of unvented, closed containers.

Section 11: Toxicological Information

Results of Component Toxicity Tests Performed:
For: Hydrogen Peroxide. An irritant of the eyes, mucous membranes and skin: Oral LD50 = 805 mg/kg, 70% solution (Rats):
Dermal LD50 > 6,500 mg/kg, 50% solution (Mice): Inhalation LC50 = 2,000 mg/m³ (Rats)

No Chemicals used in this product are listed as carcinogens or suspected carcinogens by the National Toxicological Program, IARC monograms or OSHA.

Section 12: Ecological Information

Aquatic Effects: 48-hour "Daphnia magna" EC50 = 7.7 mg/L
Bacterial test EC50 = 30 mg/L
96-hour Fathead Minnow LC50 = 16.4 mg/L

Section 13: Disposal Considerations

Waste Disposal Method: Dispose waste material in accordance with all applicable federal, state and local regulations and laws.

Section 14: Transportation Information

U.S. DOT Information:
Proper Shipping Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION,
with more than 40% but not more than 60% Hydrogen Peroxide
Hazard Class: 5.1
Packing Group: II
UN Number: UN2014
Limitations: N/A
Special Information: Non-bulk packages must have Class 5.1 and Class 8 labels.

Section 15: Regulatory Information

U.S. Federal Regulations: MSDS complies with OSHA's Hazard Communication Rule, 29CFR1910.1200.
CERCLA / Superfund, 40 CFR 117: Hydrogen Peroxide RQ = 1,000 pounds
SARA Superfund and Reauthorization Act of 1986 Title III Sections 302, 311, 312 and 313:
Section 302: This product does contain chemical(s), Hydrogen Peroxide, currently on the Extremely Hazardous Substance List, Section 302, SARA Title III.
Section 311 / 312: By our hazard evaluation, this product is hazardous. Hazard Categories: Immediate (ACUTE) Health Hazard, Fire, Reactive
Section 313: None of the chemicals are listed in Section 313.
TSCA: All substances are TSCA Listed.

Section 16: Other Information

Revision Dates, Sections, Revised By: 12-07-2003, CREATED, D. Sloan
Abbreviations used in this Document: N/A – Not Applicable, N/E – Not Established
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