

SAFETY DATA SHEET

Oxy Fresh, Color Safe Bleach

EM SYSTEMS INC.

Revision Date: November 7, 2014

Product Identifier:

Product Name: Oxy Fresh, Color Safe Bleach

Recommended Use of the Chemical and Restrictions on Use

Recommended Use: Automatic Laundry Proportioning System

Details of the Supplier of the Safety Data Sheet

Supplier Address: E.M. Systems, Inc. 1931 West 2425 South Woods Cross, UT 84087

Emergency Telephone Number

Company Phone Number: 801-292-8051

Emergency Telephone: CHEMTREC: 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification:

Serious eye damage	Category 1
Acute Toxicity (Oral)	Category 4
Oxidizing Liquids	Category 3

GHS Label element:



Signal Word: Danger

Hazard statements: May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye damage.

Precautionary Statements:

Prevention: Keep away from heat. Keep/Store away from clothing/ combustible materials. Take any precaution to avoid mixing with combustibles. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ eye protection/ face protection.

Response: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Wash thoroughly after handling.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: No other specific measures identified.

Disposal: See section 13 for waste disposal information

Other Hazards: None Known.

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SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Product AS SOLD, Pure substance or Mixture: <u>Mixture</u>		
Chemical Name	CAS No	Concentration-%
Hydrogen Peroxide	7722-84-1	33.25%

SECTION 4: FIRST AID MEASURES

Product AS SOLD:

In case of eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.
In case of skin contact:	No known effect after skin contact. Rinse with water for a few minutes.
If swallowed:	Get medical attention if symptoms occur.
If inhaled:	No special measures required. Treat symptomatically.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Notes to physician:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. See toxicology information (Section 11)

SECTION 5: FIRE-FIGHTING MEASURES

Suitable fire extinguishing

Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment..

Specific hazards arising

From the chemical: Oxidizer. Contact with other material may cause fire.

Hazardous thermal

Decomposition products: Decomposition products may include the following materials:

Carbon oxides
nitrogen oxides (NOx)
Sulfur oxides
Oxides of phosphorus

Specific fire-fighting

Methods: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters: Use personal protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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Personal Precautions : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental Precautions: Do not allow contact with soil, surface or ground water.

Methods for Containment & Clean up: Stop leak if safe to do so. Contain spillage, and then collect with noncombustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Handling : Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Storage : Keep out of reach of children. Keep container tightly closed. Store between the following temperatures: 0 and 50°C

SECTION 7: HANDLING AND STORAGE

	Product: AS SOLD	Product: AT USE, DILUTION
Handling	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling	Wash thoroughly after handling.
Storage	Keep in a cool, well-ventilated place. Keep away from reducing agents. Keep away from combustible material. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers. Store between the following temperatures: 0 and 50°C	Keep out of reach of children. Keep container tightly closed.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS:

Chemical Name	CAS No	Form of Exposure	Permissible Concentration	Basis
Hydrogen Peroxide	7722-84-1	TWA	1 ppm	ACGIH
		TWA	1 ppm, 1.4mg/m3	NIOSH REL
		TWA	1 ppm, 1.4mg/m3	OSHA Z1

Appropriate engineering controls: Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards..

Personal Protection:

Eye protection: Safety goggles, Face-shield
Hand Protection: No protective equipment is needed under normal use conditions.
Skin protection: No protective equipment is needed under normal use conditions
Respiratory protection: A respirator is not needed for product.
Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Odor: Pungent
Color: Colorless	pH: 1.7 to 3.2 100%
Flash point: not applicable, Sustains combustion	Boiling point: >100°C (>212°F)
Odor Threshold: No data available	Melting point/freezing point: No data available
Initial boiling point: No data available	Evaporation rate: any data available
Flammability (solid, gas) : No data available	Upper explosion limit : No data available
Lower explosion limit : No data available	Vapor pressure : No data available
Relative vapor density: No data available	Relative density: 1.15 (Water =1)
Solubility: Easily soluble in the following materials: cold water and hot water.	Partition coefficient: No data available
Solubility in other solvents: No data available	Thermal decomposition : No data available
Autoignition temperature : No data available	VOC : No data available
Viscosity, kinematic : No data available	Oxidizing properties : No data available
Explosive properties : No data available	
Molecular weight : No data available	

SECTION 10: STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

Hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: None known. **Materials to avoid:** Bases, Metals, Acids, Organic materials

Hazardous decomposition products: Decomposition products may include the following materials:
Carbon oxides, nitrogen oxides (NOx), Sulfur oxides, Oxides of phosphorus

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information: Potential Health Effects

Inhalation: No specific data.

Eye Contact: Causes serious eye damage

Skin Contact: Health injuries are not known or expected under normal use

Ingestion: Harmful if swallowed

Product Information: Experience with human exposure.

Eye contact: Redness, Pain, Corrosion

Skin contact: No specific data

Ingestion: No specific data

Inhalation: No specific data

Toxicity data:

Acute oral toxicity: Acute toxicity estimate: 1,462 mg/kg

Acute inhalation toxicity: 4 h acute toxicity estimate: 33.08 mg/l

Acute dermal toxicity: no data available

Skin corrosion/irritation: No skin irritation

Serious eye damage/eye irritation: Irreversible effects on the eye

Respiratory or skin sensitization: no data available

Carcinogenicity

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP: No ingredient of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive effects: no data available

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Germ cell mutagenicity: no data available
Teratogenicity: no data available
STOT-single exposure: no data available
STOT-repeated exposure: no data available
Aspiration toxicity: no data available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No known significant effects or critical hazards

Environmental Effects: Toxic to aquatic life

Toxicity to fish: no data available

Toxicity to daphnia and aquatic invertebrates: no data available

Toxicity to algae : no data available

Ingredients

Toxicity to algae : Hydrogen peroxide 72 h EC50: 1.38 mg/l

Other adverse effects: No known significant effects or critical hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations: Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse empty containers.

RCRA – Resource Conservation and Recovery
Authorization Act Hazardous waste
D001 (Ignitable)
D002 (Corrosive)

SECTION 14: TRANSPORT INFORMATION

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Land transport (DOT)

UN number: 2014
Description of the goods: Hydrogen peroxide, aqueous solutions
Class: 5.1 (8)
Packing group: II
Environmentally hazardous: No

Sea transport (IMDG/IMO)

UN number: 2014
Description of the goods: Hydrogen peroxide, aqueous solutions
Class: 5.1 (8)
Packing group: II
Marine pollutant: No

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SECTION 15: REGULATORY INFORMATION

U.S. Federal regulations

CERCLA Reportable Quantity: This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Ingredients	CAS-No	Component RQ (lbs)	Calculated product RQ (lbs)
Hydrogen peroxide	7722-84-1	1000	3008

SARA 311/312 Hazards: Fire Hazard, Acute Health Hazard

SARA 302: The following components are subject to reporting levels established by SARA Title III, Section 302:

Chemical Name	CAS No	Concentration-%
Hydrogen Peroxide	7722-84-1	33.25%

SARA 313: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

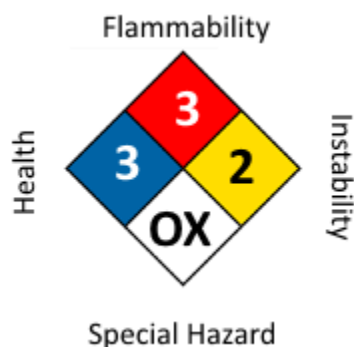
1907/2006 (EU) : not determined

Switzerland. New notified substances and declared preparations :

The mixture contains substances listed on the Swiss Inventory On the inventory, or in compliance with the inventory

United States TSCA Inventory : On TSCA Inventory

SECTION 16: OTHER INFORMATION



HMIS III:

HEALTH	3
FLAMMABILITY	3
PHYSICAL HAZARD	2
0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic	

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of publication. The information is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet