

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Common Name: OXY BLAST 50
Chemical Name: HYDROGEN PEROXIDE (<52%)
At Use Dilution: 1.61%
Product Use: Commercial bactericide disinfectant (dilution ratio 1:31)
EPA Registration: #89883-2
Preparation Date: 3/30/2016
Last Revision Date: 5/20/2020

Company Name:

Essential Water Solutions, Inc.
327 Hillcrest Drive
Story City, Iowa 50248
www.essentialwater.com

Emergency Telephone Number:

CHEMTREC 24-Hour Toll Free (800) 424-9300

Distributed by:

Oxi-Thyme, Inc
1907 Cleveland Road
Sandusky, Ohio 44870
+1-419-379-1255

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification:

Oxidizing Liquids, Category 3
Acute toxicity, Category 4 Oral
Skin irritation, Category 2
Serious Eye damage, Category 1
Specific Target organ systemic toxicity – single exposure, Category 3, Respiratory system
Acute aquatic toxicity, Category 2
Chronic aquatic toxicity, Category 4

At Use Dilution Classification:

Not classified as hazardous.

GHS Label elements, including precautionary statements

Pictogram:



Signal Word: **Danger**

Hazard Statement(s)

H272 May intensify fire: oxidizer.

H302 Harmful if swallowed

H315 Causes skin irritation.

H318 Causes serious eye damage

H335 May cause respiratory irritation.

H401 Toxic to aquatic life

Precautionary Statement(s)

P210 Keep away from Heat.

P220 Keep/Store away from clothing/combustible materials.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

P501 Dispose of contents/ container to an approved waste disposal plant.

At Use Dilution:

Precautionary Statement(s)

P264 Wash hands thoroughly after handling.

P314 Get medical advice/attention if you feel unwell.

P401 Store in accordance with local regulations.

SECTION 3: COMPOSTION/ INFORMATION ON INGREDIENTS

PRODUCT	CAS#	% BY WEIGHT
HYDROGEN PEROXIDE SOLUTION	7722-84-1	<52

At Use Dilution:

None of the ingredients are classified as hazardous.

SECTION 4: FIRST-AID MEASURES

INHALATION: Remove individual to fresh air. If breathing difficulty or discomfort occurs and persists, **obtain medical attention immediately.**

SKIN CONTACT: Wash with plenty of mild soap and water. Remove contaminated clothing and launder before reuse. If irritation occurs or persists, **obtain medical attention immediately.**

EYE CONTACT: Flush for at least 15 minutes with clean water, lifting upper and lower eyelids to ensure complete removal of solution. If irritation occurs or persists, **obtain medical attention immediately.**

INGESTION: Rinse mouth with water. Dilute by drinking 1 or 2 glasses of water. Do not induce vomiting. Never give anything to an unconscious person. **Obtain medical assistance immediately.**

At Use Dilution:

In case of eye contact:

Rinse with plenty of water.

In case of skin contact:

Rinse with plenty of water.

If swallowed:

Rinse mouth. In case of discomfort seek medical attention

If inhaled:

In case of discomfort seek medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

Fire extinguishing media: flood with water.

Flammable limits: non-combustible.

Special fire-fighting procedures: Any tank or container surrounded by fire should be flooded with water. Wear full protective clothing and use self-contained or air supplied breathing apparatus.

Unusual fire & explosion hazards: does not burn or support combustion.

Products evolved when subject to heat or combustion: no data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Dilute with a large volume of water and hold in a pond or diked area until hydrogen peroxide decomposes. Dispose according to methods outlined for waste disposal.

Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.

At Use Dilution:

Environmental precautions:

No special precautions required.

Methods for containment
and cleaning up:

Wipe up spill with absorbent material (e.g. cloth, fleece).
Dispose of in accordance with state and federal
regulations.

SECTION 7: HANDLING AND STORAGE

HANDLING: Wear chemical splash-type mono-goggles and full-face shield, impervious clothing such as rubber, PVC, etc., and rubber or neoprene gloves and shoes. Avoid cotton, wool or leather. Avoid excessive heat and contamination. Contamination may cause decomposition and generation of oxygen gas which could result in high pressures and possible container rupture. Hydrogen peroxide should be stored only in vented containers and transferred only in a prescribed manner (refer to technical data sheet). Never return unused hydrogen peroxide to original container, empty drums should be triple rinsed with water before discarding. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic.

STORAGE: Store drums in cool areas out of direct sunlight and away from combustibles. For bulk storage refer to the technical data sheet.

At Use Dilution:

Advice on safe handling:

Wash hands after handling.

Conditions for safe storage:

Keep out of reach of children. Store in suitable, labeled
containers.

COMMENTS: VENTILATION: Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into the work environment.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: If concentrations in excess of 10ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA), or other approved atmospheric-supplied respirator (ASR) equipment, such as a full-face airline respirator (ALR). DO NOT use any form of air purifying respirator or filtering face piece (dust mask), especially those containing oxidizable sorbants such as activated carbon.

Ventilation: Should be provided to minimize the release of hydrogen peroxide vapors and mists into the work environment. Spills should be minimized or confined immediately to prevent release into the work area. Remove contaminated clothing immediately and wash before reuse.

Protective Gloves: Wear liquid proof rubber or neoprene gloves. Rinse thoroughly with water prior to removal. Inspect regularly for leaks.

Eye Protection: Use chemical splash guard mono-goggles or safety glasses with side shields, or safety goggles, if airborne mist or splashing is expected.

Other Protective Clothing: Rubber or neoprene footwear (avoid leather). Impervious clothing materials such as rubber, neoprene, nitrile or polyvinyl chloride (avoid cotton, wool and leather). Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on material such as paper, fabric, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.

Work Practices: Skin that becomes contaminated with this substance should be immediately washed or showered with soap.

Hygienic Practices: Eating, drinking or smoking should not be permitted in areas where any chemical substances are handled, processed, or stored. Employees who handle these materials should wash their hands thoroughly with soap and water before eating, drinking, smoking or using toilet facilities.

At Use Dilution:

Engineering measures: Use in well-ventilated areas

Personal protective equipment

Eye protection: None required under normal conditions of use.

Hand protection: None required under normal conditions of use.

Skin protection: None required under normal conditions of use.

Respiratory protection: None required under normal conditions of use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Appearance: *clear, colorless liquid*

Odor: *odorless*

pH: approximately <2

Boiling point: 214°F (101° C)

Freezing point: -62°F (-52° C)

Evaporation rate: above 1 (Butyl Acetate =1)

Vapor Pressure: 31mm Hg @ 86°F (30° C)

Vapor Density: not available

Volatility: 100%

Soluble in water: 100%

Specific Gravity: 1.01 @ 20°C/4°C

Molecular Weight: not available

SECTION 10: STABILITY AND REACTIVITY

Stability: stable (contamination can cause decomposition).

Conditions to avoid: excessive heat or contamination could cause product to become unstable.

Materials to avoid: dirt, organics and combustibles.

Incompatibility (materials to avoid): reducing agents, iron and other heavy metals, galvanized iron, copper alloys and caustic.

Hazardous polymerization: will not occur.

Hazardous decomposition products: Oxygen which supports combustion.

SECTION 11: TOXICOLOGICAL INFORMATION

The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of hydrogen peroxide in humans, but limited evidence in experimental animals. The American Conference of Governmental Industrial Hygienists (ACGIH) has concluded that hydrogen peroxide is a "Confirmed Animal Carcinogen with Unknown Relevance to Humans."

At Use Dilution

Eye contact:	Not classified as hazardous.
Skin contact:	Not classified as hazardous.
Ingestion:	Not classified as hazardous.
Inhalation:	Not classified as hazardous.

SECTION 12: ECOLOGICAL INFORMATION

Eco-toxicity: Hydrogen peroxide in the aquatic environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Degrades in the atmosphere within the light spectrum with hydroxyl radicals in the gas phase and subsequent photolysis.

Reference ECETOC Joint Assessment of Commodity Chemicals No.22, Hydrogen Peroxide. ISSN-0773-6339. January 1993

SECTION 13: DISPOSAL CONSIDERATIONS

Acceptable method of disposal is to dilute with large amount of water and allow the hydrogen peroxide to decompose followed by discharge into a suitable treatment system in accordance with the regulatory agencies. The appropriate regulatory agencies should be contacted prior to disposal.

At Use Dilution

Disposal methods:	Can be flushed to sanitary sewer.
Disposal considerations:	Dispose of in accordance with state and federal regulations.

SECTION 14: TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Hydrogen Peroxide, Aqueous Solutions

HAZARDOUS CLASSIFICATION: 5.1

SUBSIDIARY RISK: 8

IDENTIFICATION NUMBER: UN 2014

PKG GROUP: II

ERG CODE: ERG 140

Labels:



At Use Dilution:

Not regulated as a dangerous good.

SECTION 15: REGULATORY INFORMATION

Sara title 111 section 311/312, classifies hydrogen peroxide as an immediate health hazard and a fire hazard. The minimum threshold quantity for reporting is 10,000 pounds.

Extremely Hazardous Substance:	No
CERCLA Hazardous Substance:	No
SARA 313 Toxic Chemicals:	No
TSCA Inventory:	Yes
Process Safety Management:	No
RISK Management Program:	No

SECTION 16: OTHER INFORMATION

All information, recommendations and suggestions appearing herein concerning this product are based upon data believed to be reliable; however, it is the user's responsibility to determine the safe handling and suitability for the use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by **Essential Water Solutions** as to the effects of such use, the results obtained, or the safety and toxicity of the product, nor does **Essential Water Solutions** assume any liability arising out of use, by others, of the product referred to herein. Nor is the information herein to be construed as absolutely complete since more information may be desirable or necessary when particular or exceptional conditions or circumstances exist, or because of applicable laws or government regulations.