

Safety Data Sheet

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Manufacturer:

Serum Products, LLC
1355 West Oak Commons Lane
Unit B
Marietta Ga 30062 U.S.A.
+1 (678)-290-1880



U.S.A.-DOT

Emergency Phone Numbers: Medical: (866)-477-6078 **Transportation:** (800)-535-5053

Section 1

IDENTIFICATION

- (1.) Product Name: **SERUM 1000** (2.) Product #: 5-215-05
- (3.) Chemical name/synonyms: Hydrogen Peroxide Compound (H_2O_2)
- (4.) Chemical family & Uses: Organic Cleaner, Mould removal, bacteria remover, crime scene and trauma cleanup, smoke odor eliminator in fire damaged structures and Organic Stain remover.
- (5.) Chemical formula: Proprietary
- (6.) NFPA & HMIS acute hazard rating: **2** Health: **0** Flammability: **0** Reactivity:
- (7.) Preparer Name: Bill Lyon Phone: (866)-477-6078 U.S.A.
- (8.) Personal Protective Equipment: FULL FACE MASK WITH ORGANIC VAPOR/ACID GAS/P-100 FILTERS, WATER PROOF SAFETY SUIT, CHEMICAL RESISTANT GLOVES

Section 2

HAZARD(S) IDENTIFICATION

- (1.) Hazard Classification: Oxidizer Liquid
- (2.) Signal Word: Oxidizer
- (3.) Hazard Statement:
Contains 20% Hydrogen Peroxide
- (4.) Precautionary Statement:
Avoid contact with skin. Do not ingest. Keep out of the reach of children. When not in use keep container tightly closed. Store container in cool dry areas. Store at temperatures below 100° F. Do not dispose of unused portions into water ways, creeks, rivers, estuaries or oceans. Do not reuse empty container. Do not return unused material to original container. Proper **Personal Protection Equipment (PPE)**: use full face respirator with filter cartridges such as 3M 60923 acid gas/organic vapor/P-100 or equivalent, full body protection suit with head and foot covers, chemical resistant gloves and boots, tape at the wrist over suit and gloves to prevent unwanted exposure to the product. Change air filter cartridges at manufacturers recommended frequency. Discard body suit after one use. **DO NOT REUSE BODY SUIT.**



Emergency Action Code

5.1

UN Number:

UN-2984

Emergency Transportation Phone: #

(800)-535-5053

Section 3

COMPOSITION/INFORMATION ON INGREDIENTS

Note: list all CERCLA hazardous substances at 1% or greater and carcinogens at 0.1% or greater.

Hazardous Substances

(1.) Ingredient:	(2.) Note	(3.) SARA 313	(4.) CAS #:	(5.) % range:	(6.) PEL:	(7.) LD50:	(7.) TLV:
hydrogen peroxide		No	7722-84-1	20.0%	n/d	n/d	n/d
WATER	1		7732-18-5	78.95%	N/A	N/A	N/A

Note 1.) DE-MINERALIZED, DE-CHEMICALIZED, FILTERED AND POLISHED H₂O

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Section 4

FIRST-AID MEASURES

- (1.) Eyes: rinse for 15 minutes with potable water while seeking immediate medical attention.
- (2.) Skin: wash affected area with soap & water, then rinse with clean, clear water.
- (3.) Inhalation: remove victim to fresh air, while seeking immediate medical attention.
- (4.) Ingestion: give large amounts of potable water while seeking immediate medical attention.
- (5.) Special instructions to physician: Inform medical team that product contains 17% Hydrogen Peroxide

Section 5

FIRE-FIGHTING MEASURES

- (2.) Autoignition temperature: N/A °C
- (3.) Flash point: N/A °C
- (4.) Method: TOC
- (5.) Hazardous combustion biproducts: None
- (6.) Flammable limits in air: noncombustible
- (7.) Suitable extinguishing media: water, foam or CO₂
- (8.) Fire fighting procedures: Any tank or container surrounded by fire should be flooded with water for cooling. Wear full protective clothing and self-contained breathing apparatus.
- (9.) Unusual fire explosion hazards: Product is noncombustible. Upon decomposition releases oxygen that may intensify fire.

Section 6

ACCIDENTAL RELEASE MEASURES

- (1.) Spill or leak procedures: (A.) Small spill leak: stop leak. mop or vacuum to disposal container or rinse to sanitary sewer.
- (B.) Large spill leak: stop leak. mop or vacuum to disposal container or rinse to sanitary sewer.
- (2.) Spill reportable quantity: n/a
- (3.) Waste disposal method: Dilute with a large volume of water and hold in a pond or diked area until hydrogen peroxide decomposes. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%. Dispose according to methods outlined for waste disposal.
- (4.) EPA appropriate waste classification: none
- (5.) RCRA appropriate characteristic waste: n/a (6.) if so EPA hazardous waste number: n/a
- (7.) RCRA appropriate listed waste: n/a (8.) if so EPA hazardous waste number: n/a
- (9.) non RCRA regulated waste: n/a
- (10.) Procedure for handling empty containers: do not reuse. give container to licensed drum reconditioner.
- (11.) Environmental toxicity data: BIODEGRADABLE - decomposes to water and oxygen
- (12.) Other regulatory controls: none
- (13.) Is material classified under the CLEAN WATER ACT (USA) or appropriate water regulations as a:
- (A.) Toxic pollutant (section 307): No (B.) Hazardous substance (section 311)?: No
- (14.) if yes, reportable quantity (R.Q.): n/a (15.) Oil section 311? No
- (16.) Is material classified under the CLEAN AIR ACT (USA) or appropriate CLEAN AIR regulations as a:
- (17.) Hazardous air pollutant section (12)?: No
- (18.) Comments: Keep product out of water ways, creeks and rivers.

Section 7

STORAGE AND HANDLING

- (1.) Storage: Store drums in cool areas out of direct sunlight and away from combustibles. Store at temperatures below 37.7°C or 100°F
- (2.) Handling: full-face shield, impervious clothing, such as rubber, PVC, etc., and rubber or neoprene gloves and shoes. Avoid cotton, wool and 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. Never return unused product to original container. empty drums should be triple rinsed with water before discarding. Utensils used for
- (3.) Precautionary labeling: Avoid contact with skin. Do not ingest. Keep out of the reach of children. When not in use keep

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Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

(1.) Ventilation: (A.) local exhaust X (B.) general exhaust (C.) none required

(2.) Personal protective equipment:

(A.) Respirator type: FULL FACE WITH 3M 60926 OR EQUIVALENT CARTRIDGES (ORGANIC VAPOR/ACID GAS FILTER WITH COMBINATION P100 MOLD SPORE FILTER, 3MR600923)

(B.) Gloves:

(1.) Natural rubber: (2.) plastic: X (3.) nitrile: X (4.) neoprene: X (5.) butyl:

(6.) other:

(C.) Eye protection:

(1.) glasses with side shield: (2.) full face shield: (3.) chemical splash goggles:

(4.) other: Full face respirator

(3.) PPE Symbols Required:



CHEMICAL NAME:	PEL	ACGIH	TLV's	OSHA
HYDROGEN PEROXIDE	n/d	1 ppm (TWA)		1 ppm (PEL) 1.4 mg/m3 (PEL)

(4.) Engineering Controls:

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.

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

(1.) Appearance: Water Clear to Slightly hazy

(2.) Odor: Odorless (3.) Physical state: Liquid (4.) Boiling Point: 218 °F 103 °C

(5.) Freeze Point: 6 °F -15 °C (6.) Specific Gravity: 1.07 (7.) pH Neat: 3.5 (8.) pH 1%: 4.5

(9.) % Solids: 0.5% (10.) % Volatiles: 99.5% (11.) Solubility Water: 100%

(12.) Vapor pressure: n/d (13.) Vapor density: n/d (14.) Evaporation rate: >Water

(15.) VOC Less Exempt (theoretical): 0.00 lbs./gal (16.) VOC As Packaged (theoretical): 0.00 lbs./gal.

Section 10 STABILITY AND REACTIVITY

(1.) Thermal stability: Stable

(2.) Chemical stability: Stable

(3.) Condition to avoid: Heat over 125 degrees F or 51.6 degrees C

(4.) Hazardous decomposition products: none

(5.) Hazardous polymerization: may occur: will not occur: X

(6.) Materials to avoid: all strong alkaline chemicals

(7.) Corrosive action on materials: oxidizer on iron

Section 11 TOXICOLOGICAL INFORMATION

(1.) Summary of health effects:

Immediate burning and tingling of skin with rarely possible blistering, skin turns white upon contact with liquid. No long term damage to epidermis or dermas expected. Symptoms will disappear within 30 to 60 minutes. No long term damage expected.

(2.) Eyes: Will oxidize surface of iris and white of the eye. Permanent scarring could happen. Keep out of eyes

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- (3.) Inhalation: Short term choking and gagging could occur.
- (4.) Skin: Turns skin white and causes skin to tingle uncomfortably for a period of 30 to 60 minutes, then it disappears.
- (5.) Ingestion: Causes burning of the mouth, esophagus, and stomach lining. drink large volumes of water immediately
- (6.) Toxicity Data: As with most chemicals, Toxicity depends on length of time exposed, concentration of exposure and PPE controls in place at the time of exposure.
- (7.) Primary routes(s) of entry into body: (2.) Eyes: ____ (3.) Skin: X (4.) Inhalation: ____ (5.) Ingestion: ____

Section 12 ECOLOGICAL INFORMATION (non-mandatory)

- (1.) Environment: This product is absolutely harmless to the environment. It degrades into water and oxygen. In fact this product would be good for most vegetation because it releases oxygen into the soil when degrading. When used in interior environments, it degrades rapidly into water and oxygen leaving behind nothing toxic to humans. The non-active (less than 1/2% by weight of the product is surfactant and foaming agents that are classified as GRAS (Generally Regarded As Safe) by the United States Environmental Protection Agency (EPA).

Section 13 DISPOSAL CONSIDERATIONS

- (1.) Waste Disposal: This product can be neutralize with a small amount of mild alkalinity and disposed of down the sanitary sewer system.
- (2.) Legislation: None

Section 14 TRANSPORTATION INFORMATION

- (1.) Indicate country/regulatory agency which specifies requirements: U.S.A.-DOT
- (2.) Proper Hazardous Material Shipping Description:
- UN-2984, Hydrogen Peroxide, Aqueous Solution (with not less than 8 but not more than 20 percent hydrogen peroxide) 5.1, PG III, ERG#60, Item Name: Serum 1000, Item Number: 5-215-05, Container:Pail, NMFC:48580-03
- (3.) Hazardous class: 5.1, (4.) Identification number: UN-2984, (5.) HazChem Code:
- (6.) Packaging group: PG III, (7.) Emergency response guide number: ERG#60,
- (8.) Labels required: Oxidizer
- (9.) Other requirements: none
- (10.) Note: **Product above 82.2°C or 180°F will yield large amounts of pure oxygen to possibly create an explosive condition. DO NOT SHIP THIS PRODUCT VIA AIR. SHIP GROUND ONLY**

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Section 15

REGULATORY INFORMATION

(1.) Poison Schedule: A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)

(2.) AICS: All chemicals listed on the Australian Inventory of Chemical Substances (AICS)

Section 16

OTHER INFORMATION

(1.) Additional Information:

ABBREVIATIONS:

ADB- Air Dry Basis

BEI - Biological Exposure Indice(s)

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds

CNS - Central Nervous System

IARC - International Agency for Research on Cancer

M - moles per litre, a unit of concentration

mg/m³ - Milligrams per cubic metre

NOS - Not Otherwise Specified

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline)

ppm = Parts Per Million

TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

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Chem Alert Colour: **GREEN**

Product Name: **SERUM 1000**

Product Number: **5-215-05**

Recommendations:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

COLOUR RATING SYSTEM: All Chem Alert reports has a colour rating of Green, Amber or Red for the sole purpose of providing users with a quick and easy means of determining the hazardous nature of a product. Safe handling recommendations are provided in all Chem Alert reports so as to clearly identify how users can control the hazards and there by reduce the risk (or likelihood) of adverse effects. As a general guideline, a Green colour rating indicates a low hazard, an Amber colour rating indicates a moderate hazard and a Red colour rating indicates a high hazard.

While all due care has been taken Serum Products in the preparation of the Colour Rating System, it is intended as a guide only and Serum does not provide any warranty in relation to the accuracy of the Colour Rating System. As far as is lawfully possible, Serum accepts no liability or responsibility whatsoever for the actions or omissions of any person in reliance on the Colour Rating System.

Report Status:

This document has been compiled by Serum Products the manufacturer of the product and serves as the manufacturer's Safety Data Sheet (SDS).

It is based on information concerning the product which has been provided by Serum Products or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from Serum Products.

While Serum Products has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Serum Products accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

Prepared By:

Serum Products, LLC
1355 West Oak Commons Lane
Suite B
Marietta, GA 30062
USA
+1 678 290-1880 Phone
+1 678 290-1769 Fax
E-mail: info@serumsystem.com
Web: www.serumsystem.com

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SDS Date: 11/24/13 End of Report