U.S. WATER

SAFETY DATA SHEET

BIOTROL 115

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: BIOTROL 115
Common Name: MIXTURE
SDS Number: 0304
Product Code: BI0024
Revision Date: 5/18/2015
Version: 4
EPA Number: 63838-1-71675
Internal ID: 311C
Product Use: BIOCIDE
Supplier Details: U. S. Water Services
12270 43rd St. NE
St. Michael, MN 55376

Contact: Non-emergency #: 866-663-7632
Email: SDS@uswaterservices.com
Web: www.uswaterservices.com

EMERGENCY RESPONSE: (ChemTel)
US & Canada: 800-255-3924
International: +01-813-248-0585

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Serious Eye Damage/Eye Irritation, 1
Health, Acute toxicity, 5 Inhalation
Health, Acute toxicity, 4 Dermal
Physical, Flammable Liquids, 4

GHS Label elements, including precautionary statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:

GHS Hazard Statements:

H318 - Causes serious eye damage
H333 - May be harmful if inhaled
H312 - Harmful in contact with skin
H227 - Combustible liquid

GHS Precautionary Statements:

P281 - Use personal protective equipment as required.

P302+352 - IF ON SKIN: Wash with soap and water.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P315 - Get immediate medical advice/attention.

Hazards not otherwise classified (HNOC) or not covered by GHS

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
7722-84-1	26-28%	Hydrogen peroxide
64-19-7	7-8%	Acetic acid
79-21-0	5.6-6.0%	Peracetic acid

4 FIRST AID MEASURES

Inhalation: Remove from contamination. If person has stopped breathing administer artificial respiration. Seek medical attention.

Skin Contact: Wash off with soap and plenty of water. Remove contaminated garments and wash or destroy. Seek medical attention in all cases.

Eye Contact: Flush eyes with plenty of running water for at least 15 minutes. Seek immediate medical attention.

Ingestion: Seek immediate medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms & effects (acute & delayed)**:** No data available
Indication of need for immediate medical attention: No data available
Special treatment needs: No data available

5 FIRE FIGHTING MEASURES

Flash Point: 200°F
Flash Point Method: Pensky Martens Closed cup
Burning Rate: Not applicable
Autoignition Temp: 270°C
LEL: Not determined
UEL: Not determined

Extinguishing Media:

Suitable: Water.

Unsuitable: No information available

Hazardous combustion products: Hazardous decomposition products formed under fire conditions- Carbon oxides, and other hazardous compounds

Unusual Fire or Explosion Hazards: Oxidizer. Oxygen released on exothermic decomposition may support combustion in case of surrounding fire. Oxidizing agent, may cause spontaneous ignition of combustible materials.
Special protective equipment/precautions: Wear self-contained breathing apparatus

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective equipment, emergency procedures: Avoid contact with the material. See section 8 of SDS for PPE recommendations
Environmental Precautions: Keep runoff from entering drains or waterways
Spill/Leak procedures: Contain spill or leak. Dike area if necessary to prevent spill from spreading or entering sewers and waterways. Recover as much as possible then absorb remainder with inert material. Place into closed container for disposal.
Regulatory Requirements: Dispose of recovered material in accordance with all applicable state and federal regulations.

7 HANDLING AND STORAGE

Handling Precautions: Avoid contact with eyes, skin, or clothing. Do not taste or swallow. Do not inhale vapor or mist. Use with adequate ventilation. Keep container closed when not in use. For industrial use only!

Storage Requirements: Store in closed containers away from temperature extremes and incompatible materials. Store in a cool, dry, well-ventilated area. Store in properly labeled containers in accordance with all local, state and federal guidelines.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Provide local exhaust ventilation as needed to control misting.
Personal Protective Equipment: HMIS PP, C | Safety Glasses, Gloves, Apron

Respiratory protection: If needed use MSHA/NIOSH approved respirator for dusts and mists. Seek professional advice prior to respirator selection and use. Follow all requirements of OSHA respirator regulations (29 CFR 1910.134)
Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
General Hygiene: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, using the toilet, or applying cosmetics.
PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132)

Exposure Limits:

Ingredient	CAS #	NIOSH REL
Peroxyacetic Acid	79-21-0	Not Established
Hydrogen Peroxide	7722-84-1	1ppm (TWA)
Acetic Acid	64-19-7	10ppm (TWA)

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear		
Physical State:	Liquid	**Odor:**	Sharp pungent, vinegar-like odor
Odor Threshold:	Not determined	**Solubility:**	Complete in water
Spec Grav./Density:	9.35 lb/gal	**Percent Volatile:**	99+%
Viscosity:	Not determined	**Freezing/Melting Pt.:**	Not determined
Boiling Point:	Not applicable, Product decompose	**Flash Point:**	200F
Vapor Pressure:	22 mm Hg @ 25° C	**Vapor Density:**	Not determined
pH:	<1 (10% soln.)	**Auto-Ignition Temp:**	Not determined
Evap. Rate:	Not determined	**UFL/LFL:**	Not determined
Decomp Temp:	Not determined		

10 STABILITY AND REACTIVITY

Stability: Product is stable under normal storage and use conditions. Avoid temperature extremes.

Conditions to Avoid: Avoid temperature extremes. Protect from freezing. Avoid contact with organic materials

Materials to Avoid: Dirt, alkali (lye), organics, leather, paper, wood, and all metals except aluminum and stainless steel.
Warning: Undiluted Biotrol 115 will react violently with most metals, resulting in a strongly exothermic (heat producing) reaction, and generation of oxygen gas. Off-gassing can be severe enough to overwhelm the pressure relief valve, and could burst the container. This can cause equipment damage and personal injury.

Hazardous Decomposition: Not established.

Hazardous Polymerization: Will not occur.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Hydrogen peroxide:	LD_{50} Oral	500 mg/kg, rat
Acetic Acid:	LD_{50} Oral	3310 mg/kg (rat)
	LD_{50} Dermal	1060 ul/kg, Rabbit
Peracetic acid:	LD_{50} Dermal	>12,000 mg/kg, rat

Skin Corrosion/Irritation: No data avaible
Serious eye damage/irritation: No data available
Respiratory or skin sensitization: No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive Toxicity: No data available
Specific target organ toxicity (single exposure): No data available
Specific target organ toxicity (repeated exposure): No data available
Aspiration hazard: No data available

12 ECOLOGICAL INFORMATION

Aquatic Toxicity

FRESHWATER

Fathead Minnow:	Chronic LC_{50},	1.16 ppm
Ceriodaphnia:	Chronic, Reproductivity, LC_{50},	1.03 ppm
Bluegill Sunfish:	Acute, LC_{50},	1.21 ppm
Daphnia magna:	Acute, LC_{50},	0.76 ppm
Rainbow trout:	Acute, LC_{50},	0.68 ppm

MARINE

Pacific Silverside:	Acute, LC_{50},	2.2 ppm
Sheepshead minnow:	Acute, LC_{50},	3.8 ppm
	Chronic,	5.9 ppm
Topsmelt:	Acute LC_{50},	2.8 ppm
Mysid:	Acute,	0.7 ppm
Bay Mussel:	Acute, LC_{50},	2.91 ppm
M. bahia:	Chronic,	0.35 ppm

Elimination (persistency & degradability): No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
Other adverse effects: No data available

13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

This material should be fully characterized for toxicity and possible reactivity prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

14 TRANSPORT INFORMATION

UN3149, Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water and not more than 5 percent peroxyacetic acid, 5.1,(8), PGII

DOT Transportation data (49 CFR 172.101)

See section 15 of SDS for information on Reportable Quantity chemicals (RQ)

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Hydrogen peroxide (7722-84-1) [26-28%] EHS302, MASS, NJHS, OSHAPSM, OSHAWAC, PA, TSCA, TXAIR

RQ(5000LBS), Acetic acid (64-19-7) [7-8%] CERCLA, CSWHS, HAP, MASS, OSHAWAC, PA, TSCA, TXAIR

Peracetic acid (79-21-0) [5.6-6.0%] EHS302, HAP, MASS, NJHS, OSHAPSM, PA, SARA313, TSCA

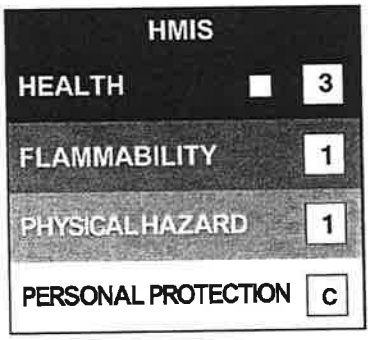
Regulatory CODE Descriptions

RQ = Reportable Quantity
EHS302 = Extremely Hazardous Substance
MASS = MA Massachusetts Hazardous Substances List
NJHS = NJ Right-to-Know Hazardous Substances
OSHAPSM = OSHA Chemicals Requiring process safety management
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level
CERCLA = Superfund clean up substance
CSWHS = Clean Water Act Hazardous substances
SARA313 = SARA 313 Title III Toxic Chemicals

TSCA: All components of this product are listed (or are not required to be listed) in the TSCA inventory
EPA / CERCLA / SARA TITLE III:
Toxic Chemical List (SARA 313): This product does not contain any chemicals subject to routine annual toxic chemical release reporting.
Extremely Hazardous Substance (SARA 302/304): This product does not contain any extremely hazardous substances subject to emergency planning requirements.
SARA 312: Acute
RCRA: Corrosive, D002

16 OTHER INFORMATION

HMIS III: Health = 3, Fire = 1, Physical Hazard = 1
HMIS PPE: C - Safety Glasses, Gloves, Apron



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Revision Notes: Updated to GHS format

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