AQUA SILK

MATERIAL SAFETY DATA SHEET

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: **AQUA SILK CHLORINE-FREE SHOCK OXIDIZER**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier
Aqua Silk
1400 Bluegrass Lakes Parkway ,
Alpharetta, GA, 30004
United States

Telephone: +17705215999
Telefax: +17705215959
Web: www.poospacare.com

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

REVISION DATE: 02/10/2011
SUPERCEDES: 12/15/2008

MSDS Number: 000000012774
SYNONYMS:
CHEMICAL FAMILY: None
DESCRIPTION / USE None established
FORMULA: None established

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	**Oxidizer, Corrosive to eyes, Corrosive to respiratory system, Moderate skin irritant, Corrosive to gastrointestinal tract**

Routes of Entry: Eyes Skin Inhalation Ingestion
Chemical Interactions: Oxidizer and will react with many substances in the body.
Medical Conditions Aggravated: Asthma, Respiratory disorders, Pre-existing eye disease, Dermatitis

Human Threshold Response Data

Odor Threshold Not established.

Irritation Threshold 150 mg/m3

Hazardous Materials Identification System / National Fire Protection Association Classifications

Hazard Ratings :	Health	Flammability	Physical / Instability	PPI / Special hazard.
HMIS	3	0	1	
NFPA	3	0	1	Oxidizer

Immediate (Acute) Health Effects

Inhalation Toxicity: Corrosive to the respiratory tract. Inhalation of mist or vapor may cause moderate to severe irritation to the mucous membranes of the respiratory tract.

Skin Toxicity: Not expected to be absorbed through the skin. Moderate Skin Irritant

Eye Toxicity: Corrosive. Burns can occur following exposure. Direct contact may cause impairment of vision, corneal damage and/or blindness. Rinsing of the eye should take place immediately.

Ingestion Toxicity: Harmful if swallowed. Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding, and/or tissue ulceration. Ingestion may cause severe damage to the gastrointestinal tract with the potential to cause perforation. May cause rapid release of oxygen which may expand the esophagus or stomach resulting in severe damage.

Acute Target Organ Toxicity: Eyes, Skin, Respiratory Tract, Gastrointestinal tract

Prolonged (Chronic) Health Effects

Carcinogenicity: The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to Its Carcinogenicity to Humans. The FDA determined that this product is not carcinogenic in laboratory animals.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Inhalation: There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.

Skin Contact: There are no known or reported effects from chronic exposure except for effects (if any) similar to those experienced from acute exposure.

Ingestion:	There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.
Sensitization:	This product has not been tested. However based on similar structured materials, this product is not expected to cause allergic skin sensitization.
Chronic Target Organ Toxicity:	Eyes
Supplemental Health Hazard Information :	No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS OR CHEMICAL NAME	CAS #	% RANGE
HYDROGEN PEROXIDE (H2O2)	7722-84-1	

4. FIRST AID MEASURES

Inhalation:	IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.
Skin Contact:	IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.
Eye Contact:	IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.
Ingestion:	IF SWALLOWED: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA):	The product is not flammable., Not combustible., The substance or mixture is not classified as pyrophoric., Not explosive

Flammable Properties

Fire / Explosion Hazards:	Will not burn Oxygen is a decomposition product of hydrogen peroxide. The generation of oxygen will increase the burning rate or ignitable materials.

Extinguishing Media:	Water spray
Fire Fighting Instructions:	Use water spray to cool unopened containers. In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:	Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.
Spill Mitigation Procedures	
Air Release:	Keep people away from and upwind of spill/leak.
Water Release:	solubleIf the product contaminates rivers and lakes or drains inform respective authorities.
Land Release:	Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust.Do not contaminate ponds, waterways or ditches with chemical or used container.
Additional Spill Information :	Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

7. HANDLING AND STORAGE

Handling:	Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing vapors, mist or gas.
Storage:	Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed. Do not freeze. Keep product tightly sealed in original containers. Store product in a cool, dry, well-ventilated area. Store away from combustible or flammable products. Keep product packaging clean and free of all contamination, including, e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc.
Incompatible Materials for Storage:	Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

Protective Equipment for Routine Use of Product

Respiratory Protection :	Wear a NIOSH approved respirator if levels above the exposure limits are possible.
Respirator Type :	NIOSH approved full-face positive pressure supplied-air respirator
Skin Protection :	Avoid contact with skin. Impervious gloves A full impervious suit is recommended if exposure is possible to a large portion of the body.
Eye Protection:	Chemical resistant goggles must be worn. Face-shield
Protective Clothing Type:	Butyl rubber, Natural rubber, Nitrile, VitonTM
General Protective Measures:	Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Limit Data

CHEMICAL NAME	CAS #	Name of Limit	Exposure
HYDROGEN PEROXIDE (H2O2)	7722-84-1	ACGIH	1 ppm TWA
HYDROGEN PEROXIDE (H2O2)	7722-84-1	OSHA Z1	1 ppm TWA 1.4 mg/m3 TWA
HYDROGEN PEROXIDE (H2O2)	7722-84-1	NIOSH-IDLH	75 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	34.00 Gm
Specific Gravity :	1.100 20 °C
pH :	2.7
Boiling Point:	104 °C 219 °F

Freezing Point:	
	not applicable
Melting Point:	
	not applicable
Density:	
Bulk Density:	no data available
Vapor Pressure:	186.7 hPa
Vapor Density:	no data available
Viscosity:	no data available
Solubility in Water:	soluble
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	no data available
Oxidizing:	None established
Volatiles, % by vol.:	
VOC Content	no data available
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat., Avoid concentrating the hydrogen peroxide. Concentrated hydrogen peroxide solutions are reactive, often violently, with a wide range of inorganic and organic chemicals.
Chemical Incompatibility:	Bases, Copper, Copper alloys, ferrous metals, brass, strong reducing agents, Contact with combustible materials may cause a fire.
Hazardous Decomposition Products:	Oxygen is a decomposition product of hydrogen peroxide. The generation of oxygen will increase the burning rate or ignitable materials.
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology
Oral LD50 value:

HYDROGEN PEROXIDE (H_2O_2)	LD50 (35% Hydrogen Peroxide)	=	1,232 mg/kg	Rat

Component Animal Toxicology
Dermal LD50 value:

HYDROGEN PEROXIDE (H2O2)	LD50 (35% Hydrogen Peroxide) > 2,000 mg/kg	Rabbit

Component Animal Toxicology
Inhalation LC50 value:

HYDROGEN PEROXIDE (H2O2)	Inhalation LC50 8 h (90% Hydrogen Peroxide) > 2,000 ppm	Rat
HYDROGEN PEROXIDE (H2O2)	Inhalation LC50 4 h (50% Hydrogen Peroxide) > 0.17 MG/L	Rat

Product Animal Toxicity

Oral LD50 value:	LD50 Believed to be approximately 3,000 - 4,000 mg/kg rat
Dermal LD50 value:	LD50 Believed to be > 2,000 mg/kg rabbit
Inhalation LC50 value:	no data available
Skin Irritation:	Moderate skin irritant
Eye Irritation:	Corrosive to eyes
Skin Sensitization:	Not believed to be sensitising to skin.

Subchronic / Chronic Toxicity: There are no known or reported effects from chronic exposure.

Reproductive and Developmental Toxicity:

HYDROGEN PEROXIDE (H2O2)	Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity:

HYDROGEN PEROXIDE (H2O2)	This product has been tested for mutagenicity. Tests revealed both positive and negative results. Based on the weight of evidence, we judge this product NOT to be a mutagenic hazard.

Carcinogenicity:

HYDROGEN PEROXIDE (H2O2)	The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to Its Carcinogenicity to Humans. The FDA determined that this product is not carcinogenic in laboratory animals.

12. ECOLOGICAL INFORMATION

Overview: Moderately toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: **HYDROGEN PEROXIDE (H2O2)**

Fathead minnow (Pimephales promelas),	-	96 h LC50 = 16.4 mg/l
Channel Catfish (Ictalurus punctatus rafinesque),	-	96 h LC50 = 37.4 mg/l
Rainbow trout (Salmo gairdneri),	-	48 h Lethal > 40 mg/l
Daphnia magna,	-	24 h EC50= 7.7 mg/l
Daphnia pulex	-	48 h LC50= 2.4 mg/l

13. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary : If this product becomes a waste, it meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D001.As a hazardous liquid waste it must be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : D001

14. TRANSPORT INFORMATION

Land (US DOT): UN2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION 5.1 8 II
Water (IMDG): UN2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION, 5.1 8 II
Marine Pollutant: No

Air (IATA): UN2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION, 5.1 8 II
Emergency Response Guide Number: ERG # 140

EMS: F-H, S-Q

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302	TPQ (threshold planning quantity)	None established

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA	Reportable quantity	None established
ZUS_SAR302	Reportable quantity	None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313	De minimis concentration	None established

Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

HON SOC None established

Clean Air Act VOC Section 111:

CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP	None established
ZUS_CAAHRP	None established
CAA AP	None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
ZUSPA_RTK	None established

New Jersey:

CAS #	COMPONENT NAME
ZUSNJ_RTK	None established

Massachusetts:

CAS #	COMPONENT NAME
ZUSMA_RTK	None established

California Proposition 65:

CAS #	COMPONENT NAME
ZUSCA_P65	None established

WHMIS Hazard Classification:

None established

16. OTHER INFORMATION

MSDS REVISION STATUS :

SECTIONS REVISED:	First formulated version in SAP.
Major References :	Available upon request.

AQUA SILK®

MATERIAL SAFETY DATA SHEET

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .