FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL SDS QUESTIONS & REQUESTS, CALL:

1-800-654-6911 (OUTSIDE USA: 1-423-780-2970) 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887) 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: ULTIMA YELLO FREE

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Advantis Technologies 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America REVISION DATE: SUPERCEDES:

MSDS Number: SYNONYMS: CHEMICAL FAMILY: DESCRIPTION / USE FORMULA: 000000024501 Sodium bromide None None established None established

05/26/2015

05/22/2009

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a dangerous substance according to GHS.

GHS Label element

Not a dangerous substance according to GHS.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS OR CHEMICAL NAME SODIUM BROMIDE (NABR) <u>CAS #</u> 7647-15-6 <u>% RANGE</u> 99 - 100

SECTION 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.

SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA):	Product is not known to be flammable, combustible, pyrophoric or explosive.
Flammable Properties	
Fire / Explosion Hazards: Extinguishing Media:	Material will not ignite or burn. Not Applicable Choose extinguishing media suitable for surrounding materials.
Fire Fighting Instructions:	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.
Hazardous Combustion Products:	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

SECTION 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:	This material is soluble in water.Notify all downstream users of possible contamination.Divert water flow around spill if possible and safe to do so.
Land Release:	Sweep up and shovel into suitable containers for disposal.After removal, flush contaminated area thoroughly with water.Do not contaminate ponds, waterways or ditches with chemical or used container.

Additional Spill Information :

Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all nonessential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

SECTION 7. HANDLING AND STORAGE

Handling:	Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid inhalation of dust and fumes.
Storage:	Store in a cool, dry and well ventilated place. Keep containers tightly
Incompatible Materials for Storage:	closed when not in use. Avoid creating dusts. Refer to Section 10, "Incompatible Materials."

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Protective Equipment for Ro	Ventilation beyond that of general exhaust is not normally required. No exposure limits exist for the constituents of this product. <u>utine Use of Product</u>
Respiratory Protection :	Respiratory protection not normally needed., If dusting occurs, wear a NIOSH approved respirator., Wear a NIOSH approved N95 respirator.
Skin Protection :	Wear impervious gloves to avoid skin contact.
Eye Protection:	Use safety glasses with side shields. Emergency eyewash should be provided in the immediate work area.
Protective Clothing Type:	Impervious

Components with workplace control parameters

no data available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	102.9 g/mol
pH:	6.5 - 8.0
	() 1% solution
Boiling Point:	2,534 °F (1,390 °C)
Melting point/freezing	1,391 °F (755 °C)
point	
Density	no data available

Bulk Density: Vapor Pressure:	() no data available 1.3 hPa 1483 °F (806 °C)
Vapor Density: Viscosity: Solubility in Water:	Not applicable Not applicable 946 g/l 77 °F (25 °C)
Partition coefficient n- octanol/water: Evaporation Rate: Oxidizing: Volatiles, % by vol.: VOC Content HAP Content	No data Not applicable None established no data available This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489). This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450. Not applicable

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	High temperatures, Exposure to moist air or water, Contact with incompatible substances
Chemical Incompatibility:	Strong oxidizing agents, Strong acids, Bromine trifluoride, Heavy metal salts
Hazardous Decomposition Products:	Hydrogen bromide, Sodium oxide
Decomposition Temperature:	No data

SECTION 11. TOXICOLOGICAL INFORMATION

<u>Component Animal Toxicology</u> <u>Oral LD50 value</u>: SODIUM BROMIDE LD50 = 3,500 mg/kg Rat (NABR)

<u>Component Animal Toxicology</u> <u>Dermal LD50 value</u>: SODIUM BROMIDE LD50 Believed to be > 2,000 mg/kg Rabbit (NABR)

<u>Component Animal Toxicology</u> <u>Inhalation LC50 value</u>: SODIUM BROMIDE No data (NABR)

Product Animal Toxicity Oral LD50 value: Dermal LD50 value: Inhalation LC50 value:	/ LD50 = 3,500 mg/kg Rat LD50 Believed to be > 2,000 mg/kg Rabbit no data available				
Skin Irritation:	May cause mild skin irritation.				
Eye Irritation:	May cause mild eye irritation.				
Skin Sensitization:	This material tested negative for skin sensitization in animals.				
Acute Toxicity:	May cause mild skin and eye irritation. Inhalation of dust may cause mild mucous membrane irritation (includes upper respiratory tract). Ingestion may cause gastrointestinal discomfort.				
Subchronic / Chronic Toxicity:	Not known or reported to cause subchronic or chronic toxicity.				
Reproductive and Developmental Toxicity	A three-generation reproduction study on the effects of sodium bromide in rats showed that at extremely high oral doses (4,800 mg/kg. and 19,200 mg/kg.) there was a marked decrease in the fertility of both the male and female rats. The effects of bromide on reproduction were reversible upon bromide withdrawal. Macroscopic examination of all pups born during the entire experimental period provided no evidence of birth defects.				
Mutagenicity:	Not known or reported to be mutagenic.				
Carcinogenicity:	This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.				

SECTION 12. ECOLOGICAL INFORMATION

Overview:

Practically non- toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: SODIUM BROMIDE (NABR)

Pimephales promelas (fathead minnow)	-	(nominal, static). 96 h LC50 = 16,479 mg/l
Daphnia magna, Daphnia magna, Green algae (Scenedesmus quadricauda),		(nominal, static). 48 h LC50= 11,000 mg/l (nominal, static). 48 h EC50= 5,800 mg/l (nominal, static). 7 day toxicity threshold for mortality = 2,800 mg/l

SECTION 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 DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.
Disposal Methods :	As a nonhazardous waste, it should be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG-CODE

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

Signal word	: CAUTION!
Hazard statements	: Harmful if swallowed.
	Harmful if absorbed through skin.
	Harmful if inhaled.
	Causes moderate eye irritation.
	This pesticide is toxic to fish.

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

	No components are subject to the Massachusetts Right to Know Act.	
Pennsylvania Right To Know		
	Sodium bromide	7647-15-6
New Jersey Right To Know		
	Sodium bromide	7647-15-6
California Prop 65		
	This product does not contain any chemicals known to State of	
	California to cause cancer, birth defects, or any other reproductive harm.	

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

TSCA

: The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

SECTIONS REVISED:
Major References :

First formulated version in SAP. Available upon request.

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.