

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: APPLIED BIOCHEMISTS YELLOWTRINE

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier

**Applied Biochemists
1400 Bluegrass Lakes Parkway ,
Alpharetta, GA, 30004
United States**

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

REVISION DATE: 03/31/2011
SUPERCEDES: 05/22/2009

MSDS Number: 000000012587
SYNONYMS: Sodium bromide
CHEMICAL FAMILY: None
DESCRIPTION / USE: None established
FORMULA: None established

Manufacturer

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

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Mild eye, skin and mucous membrane irritant, Eye hazard
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Routes of Entry:	Inhalation, skin, eyes, ingestion
Chemical Interactions:	No known interactions
Medical Conditions Aggravated:	Pre-existing skin disorders., Nervous system disorders

Human Threshold Response Data

Odor Threshold Not established.

Irritation Threshold Not established.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	1	0	0	
NFPA	1	0	0	

Immediate (Acute) Health Effects

Inhalation Toxicity:	Inhalation of dust may cause irritation to the mucous membranes of the respiratory tract. Any irritation would be transient with no permanent damage expected.
Skin Toxicity:	Skin contact may cause minor irritation consisting of transient redness and/or swelling. Not expected to be toxic from dermal contact.
Eye Toxicity:	Contact would be expected to cause minor irritation, consisting of transient redness and swelling. No corneal involvement or visual impairment is expected. Visual hallucinations and disturbances of color vision have been noted from the action of bromides on the eye.
Ingestion Toxicity:	Ingestion may cause irritation of the gastrointestinal tract and gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting or diarrhea. Ingestion of large quantities of this product may result in central nervous system (CNS) depression. Slightly toxic if swallowed.
Acute Target Organ 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.

Prolonged (Chronic) Health Effects

Carcinogenicity:	This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
Reproductive and Developmental Toxicity:	There are no known or reported effects on reproductive function or fetal development.
Inhalation:	There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.
Skin Contact:	Repeated or prolonged skin contact may cause some individuals to develop skin rashes (bromoderma).

Ingestion: Chronic ingestion may cause bromism, characterized by: central nervous system depression, ataxia (staggered gait), general muscular weakness and skin rashes.

Sensitization: This material tested negative for skin sensitization in animals.

Chronic Target Organ Toxicity: Central nervous system, Skin

Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

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

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): Product is not known to be flammable, combustible, pyrophoric or explosive.

Flammable Properties

Fire / Explosion Hazards: Material will not ignite or burn.

Extinguishing Media: 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.

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 non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

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 closed when not in use. Avoid creating dusts.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Ventilation beyond that of general exhaust is not normally required. No exposure limits exist for the constituents of this product.

Protective Equipment for Routine Use of Product

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

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	102.9 Gm
Specific Gravity :	3.21
	20 °C
pH :	6.5 - 8.0
	1% solution
Boiling Point:	1,390 °C
	2,435 °F
Freezing Point:	755 °C
	1,391 °F
Melting Point:	755 °C
	1,391 °F
Density:	no data available
Bulk Density:	no data available
Vapor Pressure:	1.3 hPa
	806 °C
Vapor Density:	not applicable

Viscosity:	not applicable
Solubility in Water:	946 g/l 25 °C
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	not applicable
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	Not applicable

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

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

SODIUM BROMIDE LD50 = 3,500 mg/kg Rat
(NABR)

Component Animal Toxicology

Dermal LD50 value:

SODIUM BROMIDE LD50 Believed to be > 2,000 mg/kg Rabbit
(NABR)

Component Animal Toxicology

Inhalation LC50 value:

SODIUM BROMIDE No data
(NABR)

Product Animal Toxicity

Oral LD50 value: LD50 = 3,500 mg/kg rat
Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit
Inhalation LC50 value: 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.

12. ECOLOGICAL INFORMATION

Overview: Practically non- toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: **SODIUM BROMIDE (NABR)**

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

14. TRANSPORT INFORMATION

Land (US DOT): NOT REGULATED AS A DOT HAZARDOUS MATERIAL
Water (IMDG): NOT REGULATED AS A HAZARDOUS MATERIAL,

Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL,
Emergency Response Guide Number: Not applicable

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):

Health
Physical

Immediate (Acute) Health Hazard
None

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

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

Reportable Quantity (49 CFR 172.101, Appendix):

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

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:

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
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New Jersey:

CAS #	COMPONENT NAME
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Massachusetts:

CAS #	COMPONENT NAME
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California Proposition 65:

CAS #	COMPONENT NAME
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WHMIS Hazard Classification:

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 0.1 Weight percent
341
Sodium bromide

16. OTHER INFORMATION

MSDS REVISION STATUS :

SECTIONS REVISED:

First formulated version in SAP.

Major References :

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. .