



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: APPLIED BIOCHEMISTS YELLOWTRINE

EPA Registration Number: 8959-52

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: 11/09/2010
 SUPERCEDES: 08/28/2009

MSDS Number: 000000012454
 SYNONYMS:
 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:	Reproductive hazard
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Routes of Entry:

This product will not exert a significant adverse effect to health from any route of exposure.

Chemical Interactions: No known interactions
Medical Conditions Aggravated: None known.

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: Not expected to cause irritation. Not expected to be toxic by inhalation.
Skin Toxicity: Contact would be expected to cause transient redness if not washed off and left on the skin for an extended period of time. Not expected to be toxic from dermal contact.
Eye Toxicity: Contact may cause mild irritation consisting of transient redness, swelling, and mucous membrane discharge to the conjunctiva. Not expected to cause irritation.
Ingestion Toxicity: Not expected to be toxic by ingestion. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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: This product has not been tested for reproductive or developmental effects. However, this product contains an ingredient which has been shown to be a possible reproductive or developmental hazard based on animal studies.
Inhalation: There are no known or reported effects from chronic exposure.
Skin Contact: There are no known or reported effects from chronic exposure.
Ingestion: There are no known or reported effects from chronic exposure.
Sensitization: Not expected to be a skin sensitizer.
Chronic Target Organ Toxicity: None known
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	
Sodium Borate	1303-96-4	

4. FIRST AID MEASURES

General Advice:	Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Inhalation:	IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Skin Contact:	IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Eye Contact:	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Ingestion:	IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not 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
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Flammable Properties

Fire / Explosion Hazards:	Will not burn
Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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.
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Spill Mitigation Procedures

Air Release:	not applicable
Water Release:	If the product contaminates rivers and lakes or drains inform respective authorities.
Land Release:	Sweep up and shovel into suitable containers for disposal. Avoid creating dust.
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 reuse this container.
Storage:	Keep containers tightly closed when not in use. Store in a cool, dry and well ventilated place.
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.
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Protective Equipment for Routine Use of Product

Respiratory Protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible., Wear a NIOSH approved N95 respirator.
 Skin Protection : Impervious gloves
 Eye Protection: Safety glasses with side-shields
 Protective Clothing Type: impervious clothing

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
Sodium Borate	1303-96-4	ACGIH	2 mg/m ³ TWA Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM-TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract., ACGIH 2005 Adoption, Refers to Appendix A -- Carcinogens.
Sodium Borate	1303-96-4	ACGIH	6 mg/m ³ STEL Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM-TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract., ACGIH 2005 Adoption, Refers to Appendix A -- Carcinogens.
Sodium Borate	1303-96-4	ACGIH	2 mg/m ³ TWA Inhalable fraction
Sodium Borate	1303-96-4	ACGIH	6 mg/m ³ STEL Inhalable fraction

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid
 Form No data.
 Color: No data.
 Odor: No data.
 Molecular Weight: None established
 Specific Gravity : 3.21

	20 °C
pH :	no data available
Boiling Point:	1,390 °C 2,534 °F not applicable
Freezing Point:	not determined
Melting Point:	not determined
Density:	no data available
Bulk Density:	no data available
Vapor Pressure:	1.3 hPa 806 °C
Vapor Density:	not applicable
Viscosity:	no data available
Solubility in Water:	950 g/l 25 °C
Partition coefficient n-octanol/water:	no data available
Evaporation Rate:	not applicable
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	No data

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Chemical Incompatibility:	Heavy metal salts, Bromine trifluoride, Strong oxidizing agents, Strong acids
Hazardous Decomposition Products:	Other hazardous decomposition products may be formed.
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

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

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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: Believed to be > 2,000 mg/kg

Dermal LD50 value: Believed to be > 2,000 mg/kg

Inhalation LC50 No data.
value:

Skin Irritation: Not expected to cause irritation.

Eye Irritation: May cause mild eye irritation.

Skin Sensitization: Not believed to be sensitising to skin.

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

Reproductive and A component of this product has been shown to cause reproductive or
Developmental Toxicity: developmental toxicity.

Mutagenicity: Not known or reported to be mutagenic.
Sodium Borate This material was non-mutagenic in the Ames test.

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: No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: SODIUM BROMIDE (NABR)

Fathead minnow (Pimephales - (nominal, static). 96 h LC50 = 16,479 mg/l
promelas),

Daphnia magna, - (nominal, static). 48 h LC50= 11,000 mg/l

Daphnia magna,	- (nominal, static). 48 h EC50= 5,800 mg/l
Green algae (Scenedesmus quadricauda),	- (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. As a nonhazardous solid waste it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT):	Not Regulated	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):	This is an EPA registered pesticide.
EPA Pesticide Registration Number:	8959-52

FIFRA Listing of Pesticide Chemicals
(40 CFR 180):

This product is regulated under the Federal Insecticide,
Fungicide and Rodenticide Act. It must be used for purposes
consistent with its labeling.

Superfund Amendments and Reauthorization Act (SARA) Title III:

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

Health	Delayed (Chronic) Health Hazard
Physical	None

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
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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
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Clean Air Act Toxic ARP Section 112r:

CAA 112R	None established
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Clean Air Act Socmi:

HON SOC	None established
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Clean Air Act VOC Section 111:

CAA 111	None established
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Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP	None established
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ZUS_CAAHRP	None established
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CAA AP	None established
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State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
1303-96-4	Sodium Borate

ZUSPA_RTK

Pennsylvania: Hazardous substance list
1989-08-11
BORAX

New Jersey:

CAS #	COMPONENT NAME
1303-96-4	Sodium Borate

ZUSNJ_RTK

New Jersey Right to Know Hazardous Substance List (RTK-HSL)
2007-03-01
SODIUM BORATE BORAX BORATES, TETRA, SODIUM SALTS BORAX
(B₄Na₂O₇·10H₂O)

Massachusetts:

CAS #	COMPONENT NAME
1303-96-4	Sodium Borate

ZUSMA_RTK

Massachusetts Right to Know List of Chemicals and Hazard Classifications
1993-04-24
SODIUM BORATE BORAX

California Proposition 65:

CAS #	COMPONENT NAME
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ZUSCA_P65 None established

WHMIS Hazard Classification:

Ingredient Disclosure List (WHMIS)

2007-08-24

Threshold limits: 1 Weight percent

1566

Sodium tetraborate decahydrate

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. .