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 SDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: **AB CUTRINE-PLUS GRANULAR**

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Supplier
Applied Biochemists (WI)
W175 N11163 Stonewood Drive , Suite 234
Germantown, WI, 53022
USA

Telephone: +12622554449
Telefax: +12622554449
Web: www.appliedbiochemists.com

Manufacturer
Advantis Technologies
1200 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

REVISION DATE:	05/26/2015
SUPERCEDES:	02/15/2007
MSDS Number:	000000024490
SYNONYMS:	
CHEMICAL FAMILY:	None
DESCRIPTION / USE	None established
FORMULA:	None established

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral)	:	Category 4
Acute toxicity (Inhalation)	:	Category 4
Eye irritation	:	Category 2B
Carcinogenicity	:	Category 1A
Specific target organ toxicity - repeated exposure	:	Category 2

GHS Label element

Hazard pictograms :

Signal word : Danger

Hazard statements : H302 + H332 Harmful if swallowed or if inhaled
H320 Causes eye irritation.
H350 May cause cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS OR CHEMICAL NAME	CAS #	% RANGE
Kieselguhr, calcined	91053-39-3	30 - 36
Fuller's earth	8031-18-3	22 - 28
Ethanolamine	141-43-5	8 - 14
BASIC COPPER CARBONATE	12069-69-1	4 - 10
QUARTZ (SIO2)	14808-60-7	1 - 4
CRISTOBALITE (SIO2)	14464-46-1	0 - 1

SECTION 4. FIRST AID MEASURES

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.

SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA): Product is not known to be flammable, combustible, pyrophoric or explosive.

Flammable Properties

Fire / Explosion Hazards: Decomposition of wet chemical may cause auto-ignition above 150° F.

Extinguishing Media:	Carbon dioxide (CO2) Dry powder Water fog Foam
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.
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:	Hazardous concentrations in air may be found in local spill area and immediately downwind.
Water Release:	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.Avoid creating dust.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.

SECTION 7. HANDLING AND STORAGE

Handling:	Do not take internally. Avoid contact with skin, eyes and clothing. Avoid breathing dust.
Storage:	Store in a cool, dry and well ventilated place. Isolate from incompatible materials. Keep container closed when not in use. Avoid creating dusts.
Incompatible Materials for Storage:	Refer to Section 10, "Incompatible Materials."

SECTION 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., A NIOSH approved air purifying respirator with organic vapor cartridge and N95 particulate filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.
Skin Protection :	Impervious gloves
Eye Protection:	Safety glasses with side-shields
Protective Clothing Type:	impervious clothing, Butyl rubber, Neoprene
General Protective Measures:	Ensure that eyewash stations and safety showers are close to the workstation location.

Components with workplace control parameters

Components (CAS-No.)	Value	Control parameters	Basis (Update)
Ethanolamine (141-43-5)	TWA	3 ppm	ACGIH (02 2014)
	STEL	6 ppm	ACGIH (02 2014)
BASIC COPPER CARBONATE (12069-69-1)	Conc	100 mg/m3	NIOSH/GUIDE (2005)
QUARTZ (SIO2) (14808-60-7)	TWA	0.025 mg/m3	ACGIH (02 2014)
	TWA	2.4 millions of particles per cubic foot of airThe exposure limit is calculated from the equation, 250/(%SiO2+5), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.	Z3 (2000)
	TWA	0.1 mg/m3 The exposure limit is calculated from the equation, 10/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.	Z3 (2000)

	TWA	0.3 mg/m3 The exposure limit is calculated from the equation, 30/(%SiO2+2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.	Z3 (2000)
CRISTOBALITE (SIO2) (14464-46-1)	TWA	0.025 mg/m3	ACGIH (02 2014)
	TWA	1.2 millions of particles per cubic foot of airThe exposure limit is calculated from the equation, 125/(%SiO2+5), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.	Z3 (2000)
	TWA	0.15 mg/m3 The exposure limit is calculated from the equation, 15/(%SiO2+2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.	Z3 (2000)
	TWA	0.05 mg/m3 The exposure limit is calculated from the equation, 5/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.	Z3 (2000)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	None established
pH :	
Boiling Point:	Not applicable
Melting point/freezing point	Not applicable
Density	no data available
Bulk Density:	1,200 - 1,300 kg/m3 ()
Vapor Pressure:	no data available
Vapor Density:	Not applicable
Viscosity:	no data available
Solubility in Water:	slightly soluble
Partition coefficient n-octanol/water:	No data
Evaporation Rate:	no data available
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	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.
HAP Content	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat, flames and sparks., Exposure to moisture
Chemical Incompatibility:	Strong acids, Nitrates
Hazardous Decomposition Products:	Carbon oxides, Oxides of nitrogen
Decomposition Temperature:	No data

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology
Oral LD50 value:

Ethanolamine	LD50	=	1,700 mg/kg	Rat
BASIC COPPER CARBONATE	LD50	=	1,350 mg/kg	Rat

Component Animal Toxicology
Dermal LD50 value:

Ethanolamine	LD50	Approximately	1,000 mg/kg	Rabbit
BASIC COPPER CARBONATE	no data available			

Component Animal Toxicology
Inhalation LC50 value:

Ethanolamine	LC50	1 h	> 2.42 mg/l	Mouse
	LC50	4 h	> 970 ppm	Mouse
BASIC COPPER CARBONATE	no data available			

Product Animal Toxicity

Oral LD50 value:	no data available
Dermal LD50 value:	no data available
Inhalation LC50 value:	LC50 4 h > 2.59 mg/l Rat
Skin Irritation:	Slight Skin Irritant
Eye Irritation:	Mild eye irritation
Skin Sensitization:	This material is not known or reported to be a skin or respiratory sensitizer.
Ethanolamine	This material tested negative for skin sensitization in animals.
Acute Toxicity:	May cause mild skin and eye irritation. Ingestion may cause mild gastrointestinal discomfort.
Subchronic / Chronic Toxicity:	May cause kidney and liver damage based on animal data.
Reproductive and Developmental Toxicity:	Not known or reported to cause reproductive or developmental toxicity.
Ethanolamine	This chemical has been tested in laboratory animals and no evidence of teratogenicity, embryotoxicity or fetotoxicity was seen.
Mutagenicity:	Not known or reported to be mutagenic.
Ethanolamine	This chemical has been tested in a battery of mutagenicity/genotoxicity assays and the results were negative.
Carcinogenicity:	The International Agency for Research on Cancer (IARC) has classified a component or components of this product as a Group 1 substance, Carcinogenic to Humans.
Ethanolamine	This product is not known or reported to be carcinogenic

	by any reference source including IARC, OSHA, NTP or EPA. Chemicals of similar structure have been shown not to cause cancer in laboratory animals.
QUARTZ (SIO2)	The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 1 substance, Carcinogenic to Humans.
CRISTOBALITE (SIO2)	The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 1 substance, Carcinogenic to Humans.

SECTION 12. ECOLOGICAL INFORMATION

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

Ecological Toxicity Values for: Ethanolamine

Rainbow trout (Oncorhynchus mykiss)	-	(nominal, static). 96 h LC50 = 150 mg/l
Mosquito fish	-	(nominal, static). 96 h LC50 = 337.5 mg/l
Bluegill	-	(nominal, static). 96 h LC50 = 329.16 mg/l
Pimephales promelas (fathead minnow)	-	(measured, flow-through) 96 h LC50 = 2,070 mg/l
Goldfish	-	(measured, static) 96 h LC50 = 170 mg/l
Daphnia magna (Water flea)	-	(nominal, static). 24 h LC50= 140 mg/l
Crangon crangon (shrimp)	-	(nominal, renewal). 48 h LC50> 100 mg/l
Brine shrimp	-	48 h LC50= 7,100 mg/l
Daphnia magna (Water flea)	-	48 h EC50= 65 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 : As a nonhazardous solid 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	:	DANGER!
Hazard statements	:	Harmful if swallowed. May be fatal if absorbed through skin. Harmful if inhaled. Corrosive. Causes skin burns. Corrosive. Causes irreversible eye damage. This pesticide is toxic to fish. This pesticide is toxic to aquatic invertebrates.

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

The following components are subject to reporting levels established by SARA Title III, Section 313:

copper carbonate 12069-69-1

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 contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

copper carbonate	12069-69-1	7.19 %

US State Regulations

Massachusetts Right To Know

2-Aminoethanol	141-43-5
Cristobalite	14464-46-1

Pennsylvania Right To Know

Kieselguhr, calcined	91053-39-3
Fuller's earth	8031-18-3
2-Aminoethanol	141-43-5
copper carbonate	12069-69-1

New Jersey Right To Know

Kieselguhr, calcined	91053-39-3
Fuller's earth	8031-18-3
2-Aminoethanol	141-43-5
copper carbonate	12069-69-1
Cristobalite	14464-46-1

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

Quartz (SiO2)	14808-60-7
Cristobalite	14464-46-1

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

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

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