

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 HARPOON GRANULAR AQUATIC HERBICIDE
EPA Registration Number: 8959-55

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Advantis Technologies 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America	REVISION DATE:	05/26/2015
	SUPERCEDES:	
	MSDS Number:	000000024562
	SYNONYMS:	
	CHEMICAL FAMILY:	None
	DESCRIPTION / USE	None established
	FORMULA:	None established

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Eye irritation : Category 2A
Carcinogenicity : Category 1A

GHS Label element

Hazard pictograms : 

Signal word : Danger

Hazard statements : H319 Causes serious eye irritation.
H350 May cause cancer.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

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

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Kieselguhr, calcined	91053-39-3	25 - 35
Fuller's earth	8031-18-3	20 - 30
QUARTZ (SiO ₂)	14808-60-7	1 - 4
CRISTOBALITE (SiO ₂)	14464-46-1	0 - 1
copper ethylenediamine complex	13426-91-0	5 - 15

SECTION 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.

SECTION 5. FIREFIGHTING 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:	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.
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:	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 :	Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

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."

Do Not Store At temperatures Above: 35 °C

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 equipped with combination organic vapor and P100 prefilter. 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 Butyl rubber Neoprene

Eye Protection: Use chemical goggles.

Protective Clothing Type: impervious clothing, Butyl rubber, Neoprene

General Protective Measures: Use only in an area equipped with a safety shower.

Components with workplace control parameters

Components (CAS-No.)	Value	Control parameters	Basis (Update)
QUARTZ (SiO ₂) (14808-60-7)	TWA	0.025 mg/m ³	ACGIH (02 2014)
	TWA	2.4 millions of particles per cubic foot of air The exposure limit is calculated from the equation, 250/(%SiO ₂ +5), using a value of 100% SiO ₂ . Lower percentages of	Z3 (2000)

SAFETY DATA SHEET

		SiO ₂ will yield higher exposure limits.	
	TWA	0.1 mg/m ³ The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits.	Z3 (2000)
	TWA	0.3 mg/m ³ The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower values of % SiO ₂ will give higher exposure limits.	Z3 (2000)
CRISTOBALITE (SiO ₂) (14464-46-1)	TWA	0.025 mg/m ³	ACGIH (02 2014)
	TWA	1.2 millions of particles per cubic foot of air The exposure limit is calculated from the equation, $125/(\%SiO_2+5)$, using a value of 100% SiO ₂ . Lower values of % SiO ₂ will give higher exposure limits.	Z3 (2000)
	TWA	0.15 mg/m ³ The exposure limit is calculated from the equation, $15/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower values of % SiO ₂ will give	Z3 (2000)

		higher exposure limits.	
	TWA	0.05 mg/m3 The exposure limit is calculated from the equation, $5/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits.	Z3 (2000)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	No data.
Color:	purple
Odor:	Slight amine
Molecular Weight:	None established
pH :	
Boiling Point:	Not applicable
Melting point/freezing point	Not applicable
Density	no data available
Bulk Density:	783 - 824 kg/m3 ()
Vapor Pressure:	no data available
Vapor Density:	Not applicable
Viscosity:	no data available
Solubility in Water:	no data available
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	Not applicable
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM 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.
 Chemical Incompatibility: Strong oxidizing agents, Acids, chlorinated compounds
 Hazardous Decomposition Products: Risk of decomposition.
 Decomposition Temperature: 200 °C

SECTION 11. TOXICOLOGICAL INFORMATION

Product Animal Toxicity

Oral LD50 value: 3,129 mg/kg Rat

Dermal LD50 value: > 5,000 mg/kg Rat

Inhalation LC50 No data.

value:

Skin Irritation: Slight Skin Irritant

Eye Irritation: Severe eye irritant

Skin Sensitization: Not a Skin Sensitizer

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

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

Mutagenicity: Not known or reported to be mutagenic.

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.

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 ecological information available.

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

UN number : 3077
 Description of the goods : Environmentally hazardous substances, solid, n.o.s.
 : (Copper Sulfate pentahydrate)
 Class : 9
 Packing group : III
 Labels : 9
 Emergency Response : 171
 Guidebook Number

TDG

UN number : 3077
 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
 N.O.S.
 (Copper Sulfate pentahydrate)
 Class : 9
 Packing group : III
 Labels : 9

IATA

UN number : 3077
 Description of the goods : Environmentally hazardous substance, solid, n.o.s.
 (Copper Sulfate pentahydrate)
 Class : 9
 Packing group : III
 Labels : 9MI
 Packing instruction (cargo aircraft) : 956
 Packing instruction (passenger aircraft) : 956
 Packing instruction (passenger aircraft) : Y956

IMDG-CODE

UN number : 3077
 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
 N.O.S.
 (Copper Sulfate pentahydrate)
 Class : 9
 Packing group : III
 Labels : 9
 EmS Number 1 : F-A
 EmS Number 2 : S-F

 Marine pollutant : yes

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.
 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:

Cupriethylenedia 13426-91-0
mine solution

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 SOCM I 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

Cupriethylenediamine solution	13426-91-0	9.87 %
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US State Regulations

Massachusetts Right To Know

Cristobalite	14464-46-1
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Pennsylvania Right To Know

Kieselguhr, calcined	91053-39-3
Water	7732-18-5
Fuller's earth	8031-18-3
Cupriethylenediamine solution	13426-91-0

New Jersey Right To Know

Kieselguhr, calcined	91053-39-3
Fuller's earth	8031-18-3
Cupriethylenediamine solution	13426-91-0
Quartz (SiO ₂)	14808-60-7
Cristobalite	14464-46-1

California Prop 65

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

Quartz (SiO ₂)	14808-60-7
Cristobalite	14464-46-1

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

TSCA : This is an EPA registered pesticide.
 : Copper Sulfate pentahydrate

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

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. .