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: **E-Z Clor Filter Cleaner & Degreaser**

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Manufactured for;

Alliance Trading, Inc.
109 Northpark Boulevard ,
Covington, LA, 70433-5001
USA

Telephone: +19858925521
Telefax: +19858921657
Web:

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

REVISION DATE:	05/27/2015
SUPERCEDES:	06/01/2009
MSDS Number:	000000024440
SYNONYMS:	None
CHEMICAL FAMILY:	None
DESCRIPTION / USE	None established
FORMULA:	None established

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Corrosive to metals	:	Category 1
Acute toxicity (Inhalation)	:	Category 4
Skin corrosion	:	Category 1A
Serious eye damage	:	Category 1
Specific target organ toxicity - single exposure	:	Category 3 (Respiratory system)

GHS Label element

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation.
Precautionary statements	:	**Prevention:** P234 Keep only in original container. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. **Response:** P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. P363 Wash contaminated clothing before reuse. P390 Absorb spillage to prevent material damage. **Storage:** P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P406 Store in corrosive resistant stainless steel container with a resistant inner liner. **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
HYDROCHLORIC ACID	7647-01-0	>= 5 - < 10
SULFURIC ACID	7664-93-9	>= 5 - < 10
HYDROCHLORIC ACID	7647-01-0	3 - 13
SULFURIC ACID	7664-93-9	3 - 13
Citric Acid	77-92-9	0 - 8
Polyoxyethylene octyl phenyl ether	9002-93-1	0 - 7
Alcohols, C12-18, ethoxylated and propoxylated	69227-21-0	0 - 6

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: Immediately flush skin with plenty of water for 15 minutes. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use. 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.
Notes to Physician:	Probable mucosal damage may contraindicate the use of gastric lavage.

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. Reacts with most metals to form flammable hydrogen gas.
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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:	Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus.

Spill Mitigation Procedures

Air Release:	Vapors may be suppressed by the use of water fog.Keep people away from and upwind of spill/leak.
Water Release:	The product should not be allowed to enter drains, water courses or the soil.
Land Release:	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).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. Upon contact with skin or eyes, wash off with water. Avoid breathing mist or vapor.
Storage:	Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed.

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 full-face air purifying respirator with acid gas cartridge and N-95 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 : Wear impervious gloves, boots and apron to avoid skin contact. A full impervious suit is recommended if exposure is possible to a large portion of the body.

Eye Protection: Use chemical goggles and a faceshield.

Protective Clothing Type: Neoprene, Butyl rubber, Natural rubber

General Protective Measures: An eye wash and safety shower should be provided in the immediate work area.

Components with workplace control parameters

Components (CAS-No.)	Value	Control parameters	Basis (Update)
HYDROCHLORIC ACID (7647-01-0)		2 ppm	ACGIH (02 2014)
SULFURIC ACID (7664-93-9)	TWA	0.2 mg/m3	ACGIH (02 2014)
HYDROCHLORIC ACID (7647-01-0)		2 ppm	ACGIH (02 2014)
SULFURIC ACID (7664-93-9)	TWA	0.2 mg/m3	ACGIH (02 2014)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	None established
pH :	0.0 - 2.0 ()
Boiling Point:	212 °F (100 °C)
Melting point/freezing point	No data
Bulk Density:	() no data available

Vapor Pressure:	no data available
Vapor Density:	> 1
Viscosity:	no data available
Solubility in Water:	soluble in cold water
Partition coefficient n-octanol/water:	No data.
Evaporation Rate:	No data
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 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
Chemical Incompatibility:	Strong oxidizing agents, Bases, Amines, Metals, alkalis
Hazardous Decomposition Products:	Hydrogen chloride, Oxides of nitrogen, Sulfur oxides, Carbon monoxide, Carbon dioxide
Decomposition Temperature:	No data

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology
Oral LD50 value:

HYDROCHLORIC ACID	LD50		900 mg/kg	Rabbit
SULFURIC ACID	LD50	=	2,140 mg/kg	Rat
HYDROCHLORIC ACID	LD50		900 mg/kg	Rabbit
SULFURIC ACID	LD50	=	2,140 mg/kg	Rat
Citric Acid	LD50	=	3,000 mg/kg	Rat
Polyoxyethylene octyl phenyl ether	LD50	=	4,500 mg/kg	Rat

Component Animal Toxicology
Dermal LD50 value:

HYDROCHLORIC ACID	No data			
SULFURIC ACID	LD50	>	2,000 mg/kg	Rabbit
HYDROCHLORIC ACID	No data			
SULFURIC ACID	LD50	>	2,000 mg/kg	Rabbit
Citric Acid	LD50	Believed to be >	2,000 mg/kg	Rabbit
Polyoxyethylene octyl phenyl ether	no data available			

Component Animal Toxicology
Inhalation LC50 value:

HYDROCHLORIC ACID	Inhalation LC50 1 h	3124 ppm	Rat
SULFURIC ACID	LC50 1 h (aerosol) =	1.02 mg/l	Rat
HYDROCHLORIC ACID	Inhalation LC50 1 h	3124 ppm	Rat
SULFURIC ACID	LC50 1 h (aerosol) =	1.02 mg/l	Rat
Citric Acid	no data available		
Polyoxyethylene octyl phenyl ether	no data available		

Product Animal Toxicity

Oral LD50 value:	LD50 Believed to be approximately 5,900 mg/kg Rat
Dermal LD50 value:	LD50 Believed to be > 2,000 mg/kg Rabbit
Inhalation LC50 value:	no data available
Skin Irritation:	This material is expected to be corrosive.
Eye Irritation:	This material is expected to be corrosive.
Skin Sensitization:	This material is not known or reported to be a skin or respiratory sensitizer.
Acute Toxicity:	This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract.
Subchronic / Chronic Toxicity:	Not known or reported to cause subchronic or chronic toxicity.
Reproductive and Developmental Toxicity:	Not known or reported to cause reproductive or developmental toxicity.

SULFURIC ACID	This product did not cause reproductive or developmental effects in a study with laboratory animals.
	This product did not cause reproductive or developmental effects in a study with laboratory animals.
Citric Acid	This chemical has been tested in laboratory animals and there was no evidence of reproductive toxicity or teratogenicity.

Mutagenicity: Not known or reported to be mutagenic.

HYDROCHLORIC ACID	This chemical has been shown to be non-mutagenic based on a battery of assays.
SULFURIC ACID	This product has been tested for mutagenicity. Tests revealed both positive and negative results. Based on

	the weight of evidence, we judge this product NOT to be a mutagenic hazard.
HYDROCHLORIC ACID	This chemical has been shown to be non-mutagenic based on a battery of assays.
SULFURIC ACID	This product has been tested for mutagenicity. Tests revealed both positive and negative results. Based on the weight of evidence, we judge this product NOT to be a mutagenic hazard.
Citric Acid	This product was determined to be non-mutagenic in the Ames assay. It was also shown to be negative in the Dominant lethal assay.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. The International Agency for Research on Cancer (IARC) has determined that there is sufficient evidence that occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic (Group I carcinogen). The following data is available for sulfuric acid:

HYDROCHLORIC ACID	The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to Its Carcinogenicity to Humans.
SULFURIC ACID	This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA. IARC evaluated several epidemiology studies where workers from a variety of industries had been exposed to a mixture of strong inorganic acid mists. IARC has concluded that there is sufficient evidence that occupational exposure to a mixture of strong inorganic-acid mists containing sulfuric acid is carcinogenic to humans (Group I carcinogen). Because cancer has not been observed in animals when they are exposed only to sulfuric acid mists, exposure to sulfuric acid by itself was not determined to be carcinogenic to humans.
HYDROCHLORIC ACID	The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to Its Carcinogenicity to Humans.
SULFURIC ACID	This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA. IARC evaluated several epidemiology studies where workers from a variety of industries had been exposed to a mixture of strong inorganic acid mists. IARC has concluded that there is sufficient evidence that occupational exposure to a mixture of strong inorganic-acid mists containing sulfuric acid is carcinogenic to humans (Group I carcinogen). Because cancer has not been observed in animals when they are exposed only to sulfuric acid mists, exposure to sulfuric acid by itself was not determined to be carcinogenic to humans.

Citric Acid	The carcinogenicity has been evaluated through animal study and it was found not to be carcinogenic.

SECTION 12. ECOLOGICAL INFORMATION

Overview: Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems., No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: HYDROCHLORIC ACID

Mosquito fish	-	96 h LC50 = 282 mg/l
Bluegill	-	48 h LC50 = 3.6 mg/l
Pimephales promelas (fathead minnow)	-	96 h LC50 = 21.9 mg/l
Common shrimp (Crangon crangon)	-	(nominal, renewal). 48 h LC50= 260 mg/l
Daphnia magna,	-	48 h EC50= 0.492 mg/l

Ecological Toxicity Values for: SULFURIC ACID

Mosquito fish	-	(nominal, static). 96 h LC50 42 mg/l
Bluegill sunfish	-	96 h LC50 10.5 mg/l
Common shrimp (Crangon crangon)	-	(nominal, renewal). 48 h LC50 70-80 mg/l
Daphnia magna,	-	24 h EC50 29 mg/l

Ecological Toxicity Values for: HYDROCHLORIC ACID

Mosquito fish	-	96 h LC50 = 282 mg/l
Bluegill	-	48 h LC50 = 3.6 mg/l
Pimephales promelas (fathead minnow)	-	96 h LC50 = 21.9 mg/l
Common shrimp (Crangon crangon)	-	(nominal, renewal). 48 h LC50= 260 mg/l
Daphnia magna,	-	48 h EC50= 0.492 mg/l

Ecological Toxicity Values for: SULFURIC ACID

Mosquito fish	-	(nominal, static). 96 h LC50 42 mg/l
Bluegill sunfish	-	96 h LC50 10.5 mg/l
Common shrimp (Crangon crangon)	-	(nominal, renewal). 48 h LC50 70-80 mg/l
Daphnia magna,	-	24 h EC50 29 mg/l

Ecological Toxicity Values for: Citric Acid

Lepomis macrochirus (Bluegill sunfish)	-	(static). 96 h LC50 = 1,516 mg/l
Daphnia magna (Water flea)	-	72 h EC50Approximately 120 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 meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D002.
Disposal Methods :	As a hazardous liquid waste it must be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT

UN number	:	1760
Description of the goods	:	Corrosive liquids, n.o.s.
	:	(Sulphuric acid, hydrochloric acid)
Class	:	8
Packing group	:	II
Labels	:	8
Emergency Response Guidebook Number	:	154

TDG

UN number	:	1760
Description of the goods	:	CORROSIVE LIQUID, N.O.S. (Sulphuric acid, hydrochloric acid)
Class	:	8
Packing group	:	II
Labels	:	8

IATA

UN number	:	1760
Description of the goods	:	Corrosive liquid, n.o.s. (Sulphuric acid, hydrochloric acid)
Class	:	8
Packing group	:	II
Labels	:	8

Packing instruction (cargo aircraft)	:	855
Packing instruction (passenger aircraft)	:	851
Packing instruction (passenger aircraft)	:	Y840

IMDG-CODE

UN number	:	1760
Description of the goods	:	CORROSIVE LIQUID, N.O.S. (Sulphuric acid, hydrochloric acid)
Class	:	8
Packing group	:	II
Labels	:	8
EmS Number 1	:	F-A
EmS Number 2	:	S-B

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sulphuric acid	7664-93-9	1000	

SARA 302

The following components are subject to reporting levels established by SARA Title III, Section 302:

hydrochloric acid	7647-01-0
Sulphuric acid	7664-93-9

SARA 313

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

hydrochloric acid	7647-01-0
Sulphuric acid	7664-93-9

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

hydrochloric acid	7647-01-0	8.917 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

hydrochloric acid	7647-01-0	8.917 %
Sulphuric acid	7664-93-9	8.742 %

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

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

hydrochloric acid	7647-01-0	8.917 %
Sulphuric acid	7664-93-9	8.742 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

hydrochloric acid	7647-01-0	8.917 %
Sulphuric acid	7664-93-9	8.742 %

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

hydrochloric acid	7647-01-0
Sulphuric acid	7664-93-9

Pennsylvania Right To Know

hydrochloric acid	7647-01-0
Sulphuric acid	7664-93-9
Citric acid	77-92-9

New Jersey Right To Know

hydrochloric acid	7647-01-0
Sulphuric acid	7664-93-9
Citric acid	77-92-9
Polyoxyethylene octyl phenyl ether	9002-93-1

California Prop 65

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

Sulphuric acid	7664-93-9

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.

: Nonionic Surfactant

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.

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. .