FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL SDS QUESTIONS & REQUESTS, CALL:

1-800-654-6911 (OUTSIDE USA: 1-423-780-2970) 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887) 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: Ultima Power Wash Cell Cleaner

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Advantis Technologies 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America REVISION DATE: SUPERCEDES:

MSDS Number: SYNONYMS: CHEMICAL FAMILY: DESCRIPTION / USE FORMULA: 00000025326 None

05/26/2015

Not Applicable/Mixture Filter cleaner None established

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Corrosive to metals	:	Category 1
Contraine to metals	•	Category
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. 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.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

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 HYDROCHLORIC ACID	<u>CAS #</u> 7647-01-0	<u>% RANGE</u> 16 - 22
POLYETHER DIOL	9003-11-6	2 - 8
2,5-Furandione polymer with ethenylbenzene, sulfonated, sodium salt	68037-40-1	1 - 3

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 Flash Point:	Not applicable
Autoignition Temperature:	No data
Fire / Explosion Hazards:	This material is not expected to burn unless all the water is boiled away. The remaining compounds may be ignitable. Reacts with most metals to form flammable hydrogen gas.
Extinguishing Media:	Not Applicable Choose extinguishing media suitable for surrounding materials.
Fire Fighting Instructions:	Response to this material requires the use of a full encapsulated suit and self-contained breathing apparatus (SCBA). Use water to cool containers.
Hazardous Combustion Products:	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Upper Flammable / Explosive Limit, % in air:	No data
Lower Flammable / Explosive Limit, % in air:	No data

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency	Additional protective clothing must be worn to prevent personal
Situations:	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.

Hazardous concentrations in air may be found in local spill area and immediately downwind. Vapors may be suppressed by use of water fog but will slowly release hydrochloric acid. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.
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. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.
Create a dike or trench to contain materials. Absorb spill with inert material (e.g., dry sand, clay, earth or commercial absorbent), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.
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 and well ventilated place. Isolate from incompatible materials. Keep containers tightly closed when not in
Incompatible Materials for Storage:	use. 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. <u>Protective Equipment for Routine Use of Product</u>		
Respiratory Protection :	Wear a NIOSH approved respirator if levels above the exposure limits are possible.	
Respirator Type :	A NIOSH approved full-face or half-face respirator in combination with chemical goggles. A NIOSH approved air purifying respirator equipped with combination acid-gas/organic vapor cartridge and P95 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:	ι
Protective Clothing Type:	lr
General Protective	A
Measures:	а

Jse chemical goggles and a faceshield. mpervious, Butyl rubber, Neoprene 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)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	clear
Color:	Colorless
Odor:	Pungent
Molecular Weight:	Not applicable/Mixture
pH :	1.6
, Boiling Point:	No data
Melting point/freezing	No data
point	
Density:	
-	No data
Vapor Pressure:	No data
Vapor Density:	No data
Viscosity:	No data
Fat Solubility:	No data
Solubility in Water:	Soluble
Partition coefficient n-	No data
octanol/water:	
Evaporation Rate:	No data
Oxidizing:	No data
Volatiles, % by vol.:	No data
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	No data

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions. Product will not undergo hazardous polymerization.
Conditions to Avoid:	High temperatures
Chemical Incompatibility:	Strong oxidizing agents, Bases, Metals, Formaldehyde
Hazardous Decomposition Products:	Carbon monoxide, Carbon dioxide, Chlorine, Hydrogen chloride
Decomposition Temperature:	No data

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Tox Oral LD50 value:	kicology	
HYDROCHLORIC ACI	D LD50 900 mg/kg Rabbit	
POLYETHER DIOL	LD50 > 5,000 mg/kg Rat	
FOLTETHER DIOL	EDSU > 5,000 mg/kg Kat	
Component Animal Tox Dermal LD50 value: HYDROCHLORIC ACII POLYETHER DIOL		
Component Animal Tox Inhalation LC50 value: HYDROCHLORIC ACII		
POLYETHER DIOL	Inholation I CE0. 1 h and 200 mg/l. Dat	
	Inhalation LC50 1 h > 200 mg/l Rat	
Product Animal Toxicity Oral LD50 value: Dermal LD50 value: Inhalation LC50 value: Skin Irritation: Eye Irritation: Skin Sensitization: Acute Toxicity: Subchronic / Chronic Toxicity: Reproductive and Developmental Toxicity	 LD50 Believed to be approximately 4,700 mg/kg Rat no data available LC50 1 h (aerosol) Believed to be > 24 mg/l Rat This material is expected to be corrosive. This material is expected to be corrosive. This material is not known or reported to be a skin or respiratory sensitizer. This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract. There are no known or reported effects from repeated exposure except those secondary to burns. Not known or reported to cause reproductive or developmental toxicity. 	
POLYETHER	DIOL Not known or reported to cause reproductive or developmental toxicity.	
Mutagenicity:	Not known or reported to be mutagenic.	
HYDROCHLC	·	
POLYETHER	DIOL 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.	
HYDROCHLORIC ACID The International Agency for Research on Cancer		
Ultima Power Wash Cell (Cleaner	

POLYETHER DIOL

(IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to Its Carcinogenicity to Humans.

This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

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

Ecological Toxicity Values for: POLYETHER DIOL

Fish - 96 h LC50 Believed to be > 100 mg/l based on available data and comparison to similar compounds.

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 solid waste, it must be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : D002

SECTION 14. TRANSPORT INFORMATION

DOT UN number Description of the goods Class Packing group Labels Emergency Response Guidebook Number	: 1789 : Hydrochloric acid : 8 : II : 8 : 157
TDG UN number Description of the goods Class Packing group Labels	: 1789 : HYDROCHLORIC ACID : 8 : II : 8
IATA UN number Description of the goods Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passenger aircraft) Packing instruction (passenger aircraft)	 : 1789 : Hydrochloric acid : 8 : II : 8 : 855 : 851 : Y840
IMDG-CODE UN number Description of the goods Class Packing group Labels EmS Number 1 EmS Number 2	: 1789 : HYDROCHLORIC ACID : 8 : II : 8 : F-A : S-B
Marine pollutant	: yes

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)
hydrochloric acid	7647-01-0	5000	

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
hydrochloric acid	7647-01-0	5000	

SARA 302

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

hydrochloric acid 7647-01-0

SARA 313

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

hydrochloric acid 7647-01-0

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 19.2 %

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 19.2 %

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 19.2 %

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

hydrochloric acid	7647-01-0	19.2 %

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
Pennsylvania Right To Know		
	hydrochloric acid	7647-01-0
	poly(ethylene propylene) glycol	9003-11-6
New Jersey Right To Know		
	hydrochloric acid	7647-01-0
	poly(ethylene propylene) glycol	9003-11-6
	2,5-Furandione polymer with ethenylbenzene, sulfonated, sodium salt	68037-40-1
California Prop 65		
·	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.	
The components of this product are	reported in the following inve	entories:
TSCA	: The components of this pro Inventory of Existing Chem	duct are listed on the TSCA ical Substances.

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.

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