

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: **Salt Solutions by Ultima Weekly Shock Oxidizer**

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Advantis Technologies 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America	REVISION DATE:	08/20/2015
	SUPERCEDES:	05/26/2015
	MSDS Number:	000000024384
	SYNONYMS:	None
	CHEMICAL FAMILY:	None
	DESCRIPTION / USE	Water treatment chemical
	FORMULA:	None established

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Oxidizing solids	:	Category 2
Skin corrosion	:	Category 1A
Skin sensitisation	:	Sub-category 1B
Serious eye damage	:	Category 1
Specific target organ toxicity - single exposure	:	Category 3

GHS Label element

Hazard pictograms	:	
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Signal word	:	Danger
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Hazard statements	:	H272 May intensify fire; oxidizer. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.
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H335 May cause respiratory irritation.

Precautionary statements

- : **Prevention:**
 P260 Do not breathe vapours.
 P264 Wash hands thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 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.
 P310 Immediately call a POISON CENTER or doctor/ physician.
 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 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P321 Specific treatment (see supplemental first aid instructions on this label).
 P362 + P364 Take off contaminated clothing and wash it before reuse.
- Storage:**
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
- Disposal:**
 P501 Dispose of contents/container in accordance with local regulation.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8	87 - 95
Sodium tetraborate pentahydrate	12179-04-3	1 - 4
POTASSIUM PEROXYDISULFATE	7727-21-1	1 - 4

Tetra[carbonato(2-
)]dihydropentamagnesium

7760-50-1

0 - 2

Active Ingredient in this composition is POTASSIUM PEROXYMONOSULFATE, CAS. No. 10058-23-8,
Concentration: 43-47% (Typical 45%)

SECTION 4. FIRST AID MEASURES

General Advice:	Call a physician immediately.
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.
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.

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:	Not applicable
Fire / Explosion Hazards:	Material will not ignite or burn. Will release oxygen when heated, intensifying a fire
Extinguishing Media:	Water only.
Fire Fighting Instructions:	In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8. Use water to cool containers.
Upper Flammable / Explosive Limit, % in air:	Not applicable
Lower Flammable / Explosive Limit, % in air:	Not applicable

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: Keep people away from and upwind of spill/leak.
 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.
 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 inhalation of dust and fumes.
 Storage: Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed.
 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., Wear a NIOSH approved N95 respirator.
 Skin Protection : Wear impervious gloves 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.
 Protective Clothing Type: Neoprene
 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)
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SAFETY DATA SHEET

Sodium tetraborate pentahydrate (12179-04-3)	TWA	2 mg/m3	ACGIH (02 2014)
	STEL	6 mg/m3	ACGIH (02 2014)
POTASSIUM PEROXYDISULFATE (7727-21-1) [as persulfate]	TWA	0.1 mg/m3	ACGIH (02 2014)

Active Ingredient in this composition is POTASSIUM PEROXYMONOSULFATE, CAS. No. 10058-23-8, Concentration: 43-47% (Typical 45%)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	granular
Color:	purple
Odor:	none
Molecular Weight:	None established
pH :	1.43 () 10% solution
Boiling Point:	no data available
Melting point/freezing point	no data available
Density	no data available
Vapor Pressure:	no data available
Vapor Density:	Not volatile
Viscosity:	
Solubility in Water:	250 g/l 68 °F (20 °C)
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 SOCMII 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., Product will not undergo hazardous polymerization.

Conditions to Avoid: High temperatures, Exposure to moist air or water

Chemical Incompatibility: Oxidizing agents, Heavy metal salts, Cyanides, Halides

Hazardous Decomposition Products: Decomposes when heated or dampened, releasing oxygen and heat, Oxides of sulfur

Decomposition Temperature: no data available

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

Pentapotassium bis(peroxymonosulphate) bis(sulphate)	LD50	500 mg/kg	Rat
Sodium tetraborate pentahydrate	LD50	3,200 - 3,400 mg/kg	= Rat

Component Animal Toxicology

Dermal LD50 value:

Pentapotassium bis(peroxymonosulphate) bis(sulphate)	LD50	> 2,000 mg/kg	Rat
Sodium tetraborate pentahydrate	LD50	> 2,000 mg/kg	Rabbit

Component Animal Toxicology

Inhalation LC50 value:

Sodium tetraborate pentahydrate	Inhalation LC50 4 h	>	2 mg/l	Rat
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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 value: No data.

Skin Irritation: Corrosive to skin

Eye Irritation: Corrosive to eyes

Skin Sensitization: Possible skin sensitizer based on animal tests

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.

Sodium tetraborate pentahydrate

Boric acid has been evaluated in several laboratory animal species and in only one species was found to cause fetotoxicity at maternally toxic doses. Based on this data, this product may have the potential to cause developmental toxicity.

Mutagenicity: 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.

SECTION 12. ECOLOGICAL INFORMATION

Overview: Moderately toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: Sodium tetraborate pentahydrate

Rainbow trout (embryo - larval stage)	-	24 day LC50 (chronic toxicity) = 88 mg/l
Daphnia magna,	-	24 h EC50= 242 mg/l
Green algae (Scenedesmus subspicatus)	-	96 h EC10 = 24 mg/l

Ecological Toxicity Values for: POTASSIUM PEROXYDISULFATE

Cyprinus carpio (Carp)	-	48 h LC50 = 1,360 mg/l
Oncorhynchus mykiss (rainbow trout)	-	48 h LC50 = 234 mg/l
Poecilia reticulata (guppy)	-	48 h LC50 = 845 mg/l
Daphnia magna (Water flea)	-	48 h LC50= 92 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 will be a nonhazardous waste.

Disposal Methods : 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 : 3260
 Description of the goods : Corrosive solid, acidic, inorganic, n.o.s.
 (pentapotassium bis(peroxymonosulphate) bis(sulphate))
 Class : 8
 Packing group : II
 Labels : 8
 Emergency Response : 154
 Guidebook Number

TDG

UN number : 3260
 Description of the goods : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
 (pentapotassium bis(peroxymonosulphate) bis(sulphate))
 Class : 8
 Packing group : II
 Labels : 8

IATA

UN number : 3260
 Description of the goods : Corrosive solid, acidic, inorganic, n.o.s.
 (pentapotassium bis(peroxymonosulphate) bis(sulphate))
 Class : 8
 Packing group : II
 Labels : 8
 Packing instruction (cargo aircraft) : 863
 Packing instruction (passenger aircraft) : 859
 Packing instruction (passenger aircraft) : Y844

IMDG-CODE

UN number : 3260
 Description of the goods : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
 (pentapotassium bis(peroxymonosulphate) bis(sulphate))
 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

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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 does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

Dipotassium peroxodisulphate	7727-21-1
Sodium tetraborate pentahydrate	12179-04-3

Pennsylvania Right To Know

pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8
Dipotassium peroxodisulphate	7727-21-1
Sodium tetraborate pentahydrate	12179-04-3

New Jersey Right To Know

pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8
Dipotassium peroxodisulphate	7727-21-1
Sodium tetraborate pentahydrate	12179-04-3
tetra[carbonato(2-)dihydroxypentamagnesium	7760-50-1

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 inventories:

TSCA : The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

SECTIONS REVISED: 3
Major References : Available upon request.

SAFETY DATA SHEET

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. .