

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 O2 Shock Oxidizer**

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Advantis Technologies</b> 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America	REVISION DATE:	05/26/2015
	SUPERCEDES:	04/04/2013
	MSDS Number:	000000024381
	SYNONYMS:	None
	CHEMICAL FAMILY:	None
	DESCRIPTION / USE	Water treatment chemical
	FORMULA:	Not Applicable/Mixture

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Acute toxicity (Oral)	:	Category 4
Skin corrosion	:	Category 1B
Serious eye damage	:	Category 1
Respiratory sensitisation	:	Category 1
Skin sensitisation	:	Category 1

### GHS Label element

Hazard pictograms	:	
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Signal word	:	Danger
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Hazard statements	:	<p>H302 Harmful if swallowed.  H314 Causes severe skin burns and eye damage.  H317 May cause an allergic skin reaction.  H318 Causes serious eye damage.</p>
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H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements

: **Prevention:**

P260 Do not breathe dust or mist.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

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

P285 In case of inadequate ventilation wear respiratory protection.

**Response:**

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

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.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

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### 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	75 - 85
Sodium carbonate	497-19-8	10 - 20
POTASSIUM PEROXYDISULFATE	7727-21-1	1 - 4

Tetra[carbonato(2-  
)]dihydropentamagnesium

7760-50-1

0 - 2

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## 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.

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.

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## 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

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.

Upper Flammable / Explosive Limit, no data available  
% in air:

Lower Flammable / Explosive Limit, no data available  
% in air:

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## 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 and well ventilated place. Isolate from incompatible materials. Keep containers tightly closed when not in use.  
 Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Local exhaust ventilation is recommended if significant dusting occurs. Otherwise use general exhaust ventilation.

#### Protective Equipment for Routine Use of Product

Respiratory Protection : If dusting occurs, wear a NIOSH approved respirator., A NIOSH approved air purifying respirator with dust/mist filter.  
 Skin Protection : Avoid contact with skin. Impervious gloves Neoprene Butyl rubber  
 Eye Protection: Chemical resistant goggles must be worn. Face-shield  
 Protective Clothing Type: Impervious, Neoprene, Butyl rubber  
 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)
POTASSIUM PEROXYDISULFATE (7727-	TWA	0.1 mg/m3	ACGIH (02 2014)

21-1)

[as persulfate]

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State:	solid
Form	solid
Color:	white
Odor:	mild
Molecular Weight:	None established
pH :	No data.
Boiling Point:	no data available
Melting point/freezing point	no data available
Density	no data available
Bulk Density:	() no data available
Vapor Pressure:	no data available
Vapor Density:	no data available
Viscosity:	no data available
Solubility in Water:	250 g/l 68 °F (20 °C)
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	Not applicable
Oxidizing:	Product has oxidizing properties.
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 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:	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 ToxicologyOral LD50 value:

Pentapotassium bis(peroxymonosulphate) bis(sulphate) LD50 500 mg/kg Rat  
 Sodium carbonate LD50 = 4,090 mg/kg Rat

Component Animal ToxicologyDermal LD50 value:

Pentapotassium bis(peroxymonosulphate) bis(sulphate) LD50 > 2,000 mg/kg Rat  
 Sodium carbonate LD50 Believed to be > 2,000 mg/kg Rabbit

Component Animal ToxicologyInhalation LC50 value:

Sodium carbonate LC50 1 h = 4.6 mg/l Rat

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: Not believed to be sensitising to skin.

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

Sodium carbonate

Male rats were exposed to an aerosol of 2% aqueous solution of this chemical, 4 hr.day, 5 days/week for 3-1/2 months. No effect was observed at a concentration of 10 or 20 mg/cubic meter. At 70 mg/cubic meter weight gain was decreased and the lungs showed thickening of the intra-alveolar walls, hyperemia, and lymphoid infiltration., Repeated or prolonged skin contact with this product may cause dermatitis and blistering.

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

Sodium carbonate

This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen.

Mutagenicity: Not known or reported to be mutagenic.

Sodium carbonate

This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-

clastogenic in the chromosomal aberration test.

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

### Ecological Toxicity Values for: Sodium carbonate

Pimephales promelas (fathead minnow)	- (nominal, static). 96 h LC50 < 850 mg/l
Bluegill	- (nominal, static). 96 h LC50 = 320 mg/l
Mosquito fish	- (nominal, static). 96 h LC50 = 740 mg/l
Daphnia magna,	- (nominal, static). 48 h LC50= 265 mg/l
Ceriodaphnia dubia	- (nominal) 48 h EC50= 199.82 mg/l
Navicula seminulum (diatom)	- (nominal, static). 96 h EC50 = 242 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.

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**SECTION 14. TRANSPORT INFORMATION****DOT**

UN number : 3260  
Description of the goods : Corrosive solid, acidic, inorganic, n.o.s.  
(Potassium hydrogenperoxomonosulphate)  
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.  
(Potassium hydrogenperoxomonosulphate)  
Class : 8  
Packing group : II  
Labels : 8

**IATA**

UN number : 3260  
Description of the goods : Corrosive solid, acidic, inorganic, n.o.s.  
(Potassium hydrogenperoxomonosulphate)  
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.  
(Potassium hydrogenperoxomonosulphate)  
Class : 8  
Packing group : II  
Labels : 8  
EmS Number 1 : F-A  
EmS Number 2 : S-B

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**SECTION 15. REGULATORY INFORMATION****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**

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
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**Pennsylvania Right To Know**

pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8
Sodium carbonate	497-19-8
Dipotassium peroxodisulphate	7727-21-1

**New Jersey Right To Know**

pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8
Sodium carbonate	497-19-8
Dipotassium peroxodisulphate	7727-21-1
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), TSCA (USA)

**SECTION 16. OTHER INFORMATION**

SECTIONS REVISED: 3  
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. .