

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:	1-949-474-7707

PRODUCT NAME: **All Clear® Oxidizer**

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Aqua Tri® 17872 Mitchell N. Irvine, CA, 92614-6034 USA	REVISION DATE: 11/11/2014 SUPERCEDES: 07/30/2012
Telephone: +19494747707 Telefax: +19494747024 Web: WWW.ALLCLEAR.COM	SDS Number : 130000026038 SYNONYMS: Oxone® Monopersulfate Compound PS-16 Non-Chlorine Oxidizing Shock / Potassium Monopersulfate
	CHEMICAL FAMILY: None DESCRIPTION / USE: Water treatment chemical FORMULA: None established

SECTION 2 HAZARDS IDENTIFICATION

2

Product Hazard Category:

Acute Toxicity (Oral):	Category 4
Skin Corrosion:	Category 1B
Serious Eye Damage/eye irritation:	Category 1

Label Content
Pictogram



Signal Word:	Danger
Hazardous Warnings:	Harmful if swallowed. Causes severe skin burns and eye damage.
Hazardous Prevention Measures:	Do not breathe dust or mist. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/face protection. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position Comfortable for breathing.

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.

Wash contaminated clothing before reuse.

Store locked up.

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

Other Hazards:

The following percentage of the mixture consist of ingredient(s) with unknown acute toxicity: 11.92%

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS 3

Component	Cas -No.	Concentration
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8	86 - 96%
Dipotassium peroxodisulphate	7727-21-1	0 - 5%
Tetra[carbonato(2-)]dihydroxypentamagnesium	7760-50-1	1 - 2 %

SECTION 4 FIRST AID MEASURES 4

General Advice: When symptoms persist or in cases of doubt seek medical advice.

Inhalation: Move to fresh air. Oxygen or artificial respiration if needed. Call a physician immediately.

Skin Contact: If on skin, rinse well with water. Take off contaminated clothing and shoes immediately. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.

Eye Contact: Rinse immediately with plenty of water and seek medical advice.

Ingestion: DO NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

Most Important Symptoms/Effects, Acute and Delayed: No applicable data available.

Protection of First Aiders: No applicable data available.

Notes to Physician: No applicable data available.

SECTION 5 FIRE FIGHTING MEASURES 5

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media: Carbon dioxide (CO₂).

Specific Hazards: The product itself does not burn. Hazardous decomposition products Oxygen, Sulfur dioxide, Sulfur trioxide.

Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus and protective suit.

Further Information: No applicable data available.

SECTION 6 ACCIDENTAL RELEASE MEASURES 6

NOTE: Review Fire Fighting Measures and Handling (Personnel) sections before proceeding with cleanup. Use appropriate Personal Protective Equipment during clean up.

Safeguards (Personnel): Evacuate personnel to safe areas. Use personal protective equipment.

Environmental Precautions: Try to prevent the material from entering drains or water courses.

Spill Cleanup: Sweep up and shovel into suitable containers for disposal. Avoid dust formation. After cleaning, flush away traces with water.

Accidental Release Measures: Dispose of in accordance with local regulations.

SECTION 7 HANDLING AND STORAGE 7

Handling (Personnel): Use only in well-ventilated areas. Do not breathe dust. Avoid dust formation in confined areas. Avoid contact with skin and eyes. Keep away from heat and flame. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practices.

Handling (Physical Aspects): No applicable data available.

Dust Explosion Class: No applicable data available.

Storage: Keep in a cool, dry and well-ventilated place. Protect from contamination. Store in original container. Keep away from: combustible materials. Never allow product to get in contact with water during storage. Stable under recommended storage conditions.

Storage Period: No applicable data available.

Storage Temperature: No applicable data available.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8

Engineering Controls: Ensure adequate ventilation.

Personal Protective Equipment:

Respiratory Protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand Protection: Material: Impervious gloves.

Eye Protection: Wear safety glasses or coverall chemical splash goggles.

Skin and Body Protection: Where there is potential for skin contact, have available and wear as appropriate, impervious gloves, apron, pants, jacket, hood and boots. Remove and wash contaminated clothing before reuse.

Protective Measures: When using do not eat or drink. Do not breathe dust.

Exposure Guidelines:

Exposure Limit Values			
Chemical Name	Limit Authority	Limit	Method
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	AEL* (DuPont)	1 mg/m ³	15 minute TWA
Dipotassium peroxydisulphate	TLV (ACGIH)	0.1mg/3	Twa as persulfate
Potassium sulfate	AEL*(DuPont)	10 mg/m ³	8 hr. TWA

* AEL is DuPont's acceptable exposure limit. Where governmentally imposed occupational exposure limits which are lower than AEL are in effect, such limits shall take precedence.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9

Form:	Solid form, granular.
Color:	White.
Odor:	None.
Odor Threshold:	No applicable data available.
pH:	2.1 at 30 g/l 20°C (68°F)
Melting Point:	Decomposes before melting.
Boiling Point:	Not Applicable.
Flash Point:	Does not flash.
Evaporation Rate:	No applicable data available.
Flammability (solid, gas):	The product itself does not burn, but it is slightly oxidising (active oxygen content ca. 2%).
Upper Explosion Limit:	No applicable data available.
Lower Explosion Limit:	No applicable data available.
Vapour Pressure:	<0.0000017 hPa.
Density:	No applicable data available.
Specific Gravity:	2.35 at 20°C (68°F).
Bulk Density:	1,100 – 1,400 kg/m ³ .
Water Solubility:	297 – 357 g/l at 22°C (72°F).
Solubility(ies):	No applicable data available.
Partition coefficient:	
N-octanol/water:	No applicable data available.
Ignition Temperature:	No data available.
Auto-ignition temperature:	No applicable data available.
Decomposition Temperature:	No applicable data available.
Viscosity:	No applicable data available.

Oxidising Substance: This substance or mixture is not classified as oxidizing.

SECTION 10

STABILITY AND REACTIVITY

10

Reactivity: Stable under recommended storage conditions.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: No applicable data available.

Conditions to Avoid: Temperature > 50°C (>122°F). Avoid extreme heat.

Incompatibility: Halogenated compounds, cyanides, heavy metal salts.

Hazardous Decomposition Products: Oxygen, sulfur dioxide, sulfur trioxide.

SECTION 11

TOXICOLOGICAL INFORMATION

11

Oxone®PS-16 Monopersulfate Compound

Inhalation 4 h LC50: >5 mg/l, rat.

Skin Irritation: Causes burns, rabbit.

Eye Irritation: Severe eye irritation, rabbit.

Sensitization: Did not cause sensitization on laboratory animals, guinea pigs. May cause sensitization of susceptible persons by skin contact or by inhalation of dust.

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

Dermal LD50: > 2,000 mg/kg, rat. Adverse body weight effects.

Oral LD50: 500 mg/kg, rat. Gastrointestinal effects.

Mutagenicity: Animal testing did not show any mutagenic effects. Did not cause genetic damage in cultured bacterial cells. Tests on mammalian cell cultures showed mutagenic effects. Evidence suggests this substance does not cause genetic damage in animals.

Teratogenicity: Animal testing showed no developmental toxicity.

Dipotassium Peroxodisulphate

Dermal LD50: >10,000 mg/kg, rabbit.

Oral LD50: 1,130 mg/kg, rat.

Repeated Dose Toxicity: Oral, rat. NOAEL: 131.5 mg/kg Method: OECD Test Guideline 407 No toxicologically significant effects were found.

Carcinogenicity: Not classified as a human carcinogen. Animal testing did not show any carcinogenic effects. Information given is based on data obtained from similar substances.

Mutagenicity: Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Information given is based on data obtained from similar substances.

Reproductive Toxicity: No toxicity to reproduction. Animal testing showed no reproductive toxicity. Information given is based on data obtained from similar substances.

Teratogenicity: Animal testing showed no developmental toxicity. Information given is based on data obtained from similar substances.

Tetra[carbonato(2-)]dihydropentamagnesium

Oral LD50: >2,000 mg/kg, Rat

Repeated Dose Toxicity: Oral. Rat. -90d. NOAEL: 1531 mg/kg Method: OCED Test Guideline 408 No toxicologically significant effects were found. Information given is based on data obtained from similar substances.

Carcinogenicity: Not classifiable as a human carcinogen. Information given is based on data obtained from similar substances. Animal testing did not show any carcinogenic effects.

Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Evidence suggests this substance does not cause genetic damage in animals. Information given is based on data obtained from similar substances.

Reproductive Toxicity: No toxicity to reproduction. Information given is based on data obtained from similar substances. Animal testing showed no reproductive toxicity.

Teratogenicity: Information given is based on data obtained from similar substances. Animal testing showed no developmental toxicity.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12**ECOLOGICAL INFORMATION**

12

Aquatic Toxicity**Pentapotassium bis(peroxymonosulphate) bis(sulphate)**

96 h LC50: *Cyprinodon variegatus* (sheepshead minnow) 1.09 mg/l Directive 67/548/EEC, Annex V, C.1.

96 h ErC50: *Selenastrum capricornutum* (green algae) > 1 mg/l OECD Test Guideline 201.

72 h NOEC: *Selenastrum capricornutum* (green algae) 0.5 mg/l

48 h EC50: *Daphnia magna* (Water flea) 3.5 mg/l OECD Test Guideline 202

37 d: NOEC *Cyprinodon variegatus* (sheepshead minnow) 0.222 mg/l

28 d: NOEC *Americamysis Bahía* (mysid shrimp) 0.267 mg/l

Dipotassium Peroxodisulphate

96 h LC50: *Oncorhynchus mykiss* (rainbow trout) 76.3 mg/l US EPA Test Guideline OPP 72-1. Information given is based on data obtained from similar substances.

72 h EbC50: *Pseudokirchneriella subcapitata* (green algae) 83.7 mg/l OESC Test Guideline 201. Information given is based on data obtained from similar substances.

72 h NOEC: *Pseudokirchneriella subcapitata* (green algae) 39.2 mg/l OECD Test Guideline 201. Information given is based on data obtained from similar substances.

48 h EC50: *Daphnia magna* (Water flea) 120 mg/l US EPA Test Guideline OPP 72.2. Information given is based on data obtained from similar substances.

Tetra[carbonato(2-)]dihydroxypentamagnesium

96 h LC50: *Pimephales promelas* (fathead minnow) 2,120 mg/l. Information given is based on data obtained from a similar substance.

72 h EC50: *Desmodesmus subspicatus* (green algae) > 100 mg/l OECD Test Guideline 201. Information given is based on data obtained from a similar substance.

72 h NOEC: *Desmodesmus subspicatus* (green algae) 100 mg/l OECD Test Guideline 201. Information given is based on data obtained from a similar substance.

48 h EC50: *Daphnia magna* (Water flea) 140 mg/l. Information given is based on data obtained from a similar substance.

Environmental Fate**Dipotassium Peroxodisulphate**

Biodegradability: Readily biodegradable.

Tetra[carbonato(2-)]dihydroxypentamagnesium

Biodegradability: The methods for determining biodegradability are not applicable to inorganic substances.

SECTION 13**DISPOSAL CONSIDERATIONS**

13

Waste Disposal: Dispose of in accordance with local regulations.

Environmental Hazards: If recycling is not practicable, dispose of in compliance with local regulations.

SECTION 14**TRANSPORTATION INFORMATION**

14

DOT:

UN Number: 3260

Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s. (Monopersulphate Compound)

Class: 8

Packing Group: II

Labeling No: 8

IATA_C

UN Number: 3260

Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate Compound)
Class: 8
Packing Group: II
Labeling No.: 8

IMDG:
UN Number: 3260
Proper Shipping Name: CORRSOIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Monopersulfate Compound)
Class: 8
Packing Group: II
Labeling No.: 8

SECTION 15 REGULATORY INFORMATION 15

TSCA: On the inventory, or in compliance with the inventory.
Other Regulations: Active ingredient in this composition is POTASSIUM PEROXYMONOSULFATE, CAS. No. 10058-23-8, Concentration: 43-47% (typical 45%). Active ingredient may also be described by the synonym POTASSIUM MONOPERSULFATE.
SARA 313 Regulated Chemicals: 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.
PA Right to Know Regulated Chemicals: Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Dipostassium peroxodisulphate.
NJ Right to Know Regulated Chemicals: Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for substances identified as carcinogens, mutagens or teratogens): Dipostassium peroxodisulphate, Potassium hydrogen sulphate.
Title III Hazard Classification: Acute Health Hazard: Yes.
 Chronic Health Hazard: No
 Fire: No
 Reactivity/Physical Hazard: No
 Pressure: No
California Prop. 65: Chemicals known to the state of California to cause cancer, birth defects or any other harm: None known.

SECTION 16 OTHER INFORMATION 16

HMIS:



THIS SAFETY DATA SHEET (SDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS SDS 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. AQUA TRI® 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 SDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT AQUA TRI® SDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .

No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or of any other nature, are made hereunder with respect to information or the product to which the information refers.

Prepared For:

AQUA TRI®
17872 Mitchell N..
Irvine, CA. 92614-6034
(949)474-7707
WWW.ALLCLEAR.COM

End of Safety Data Sheet