

**Product Name:** Aqua Smarte Plus® Shine  
**Revision Date:** October 1, 2016  
**Supersedes:** Rev 2, 05/22/2015

**Revision:** 3

## 1. Identification

**Product Identifier:** Aqua Smarte Plus® Shine

**Other Means of Identification:** Potassium Peroxymonosulfate compound

**Recommended Use:** Oxidizing agent

**Supplier:** King Technology, Inc  
530 11<sup>th</sup> Ave S, Hopkins, MN 55343, USA  
Phone (952) 933-6118

**Emergency Telephone:** Chemtrec (800) 424-9300 (outside the U.S. 1-703-527-3887)

## 2. Hazards Identification

**GHS Classification:** Skin Corrosion: Category 1  
Eye Damage: Category 1  
Acute Toxicity (Inhalation): Category 4  
Single Target Organ Toxicity (Single Exposure): Category 3

**GHS Label Elements:**

– **Signal Word:** DANGER

– **Pictogram:**



– **Hazard Statements:** Causes severe skin burns and eye damage  
Harmful if swallowed  
May cause respiratory irritation

– **Precautionary Statements:** Do not breathe dusts or mists.  
Use only outdoors or in a well-ventilated area.  
Wash exposed areas thoroughly after handling.  
Wear protective gloves, protective clothing, and eye and face protection.  
If swallowed: Rinse mouth. Do NOT induce vomiting.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
Wash contaminated clothing before reuse.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
Immediately call a poison center or doctor.  
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.  
Store locked up in a well-ventilated place. Keep container tightly closed.  
Dispose of contents and container in accordance with local, regional, national, and international regulations.

**Product Name:** Aqua Smarte Plus® Shine  
**Revision Date:** October 1, 2016  
**Supersedes:** Rev 2, 05/22/2015

**Revision:** 3

**Unclassified Hazards:** None

**Percentage of Ingredients with Unknown Toxicity:** Zero

### 3. Composition / Information on Ingredients

Components	Weight %
Pentapotassium bis(peroxymonosulphate) bis(sulphate) CAS No: 70693-62-8	86 - 96
Dipotassium peroxodisulphate CAS No: 7727-21-1	0 - 5
Tetra[carbonato(2-)]dihydroxypentamagnesium CAS No: 7760-50-1	1 - 2

The specific percentages of composition have been withheld as trade secrets.

### 4. First-aid Measures

**Eye contact:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye. Call a poison control center or doctor immediately.

**Skin contact:** Remove contaminated clothing. Rinse skin immediately with plenty of soap and water for 15-20 minutes. Call a poison control center or doctor immediately.

**Inhalation:** Move person to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

**Ingestion:** Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Have the product container or label with you when calling a poison control center or doctor, or when going for treatment.

**Most Important Symptoms, Acute and Delayed:** Causes severe skin burns and eye damage. Harmful if swallowed. May cause respiratory irritation.

**Immediate Medical Attention Required:** If exposed, immediately call a poison center or doctor for treatment advice.

### 5. Fire-fighting Measures

The product itself does not burn.

**Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Do not use Carbon dioxide (CO<sub>2</sub>)

**Product Name:** Aqua Smarte Plus® Shine  
**Revision Date:** October 1, 2016  
**Supersedes:** Rev 2, 05/22/2015

**Revision:** 3

**Flash Point:** Does not flash

**Specific Hazards Arising From the Chemical:** Oxygen, Sulfur dioxide, Sulfur trioxide

**Special Protective Equipment and Precautions for Fire-fighters:** In the event of a fire, wear self-contained breathing apparatus and protective suit.

## 6. Accidental Release Measures

**NOTE:** Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

**Personnel Precautions:** Evacuate personnel to safe areas. Use personal protective equipment.

**Methods and Materials for Containment and Cleaning Up:** Sweep up and shovel into suitable containers for disposal. Avoid dust formation. After cleaning, flush away traces with water. Try to prevent the material from entering drains or water courses. Dispose of in accordance with local regulations.

## 7. Handling and Storage

**Handling:** Use only outdoors or 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 practice.

**Storage:** Keep in dry, cool and well-ventilated place. Protect from contamination. Store locked up in original container. Keep away from: Combustible material, never allow product to get in contact with water during storage. Stable under recommended storage conditions.

## 8. Exposure Controls and Personal Protection

**Appropriate Engineering Controls:** Ensure adequate ventilation.

**Exposure Limits:** Exposure Limit Values

Pentapotassium bis(peroxymonosulphate) bis(sulphate)  
AEL\* (DUPONT) 1 mg/m<sup>3</sup> 8 & 12 hr TWA total dust

Dipotassium peroxodisulphate  
TLV (ACGIH) 0.1 mg/m<sup>3</sup> TWA as persulfate

**Product Name:** Aqua Smarte Plus® Shine  
**Revision Date:** October 1, 2016  
**Supersedes:** Rev 2, 05/22/2015

**Revision:** 3

Potassium sulfate  
AEL\* (DUPONT) 10 mg/m<sup>3</sup> 8 hr. TWA

\*AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

#### 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 re-use.

**General protective and hygiene measures:** When using do not eat or drink. Do not breath dust.

### 9. Physical and Chemical Properties

**Appearance:** Granular white solid  
**Odor:** None  
**Odor threshold:** Not available  
**Melting point / range:** Decomposes before melting.  
**Boiling point / range:** Not available  
**Flash point:** Not available  
**Evaporation rate:** Not available  
**Flammability:** Not available  
**Vapor pressure:** < 0.0000017 hPa  
**Vapor density:** Not available  
**Solubility in water:** 297 – 357 g/L at 22 °C (72 °F)  
**Specific gravity:** 1,100 – 1,400 kg/m<sup>3</sup>  
**pH:** 2.1 at 30 g/L 20 °C (68 °F)  
**Flammability limits:** Not available  
**Partition coefficient:** Not available  
**Auto-ignition temperature:** Not available  
**Decomposition temperature:** Not available  
**Viscosity:** Not available

### 10. Stability and Reactivity

**Reactivity:** This product is not reactive under normal conditions.

**Stability:** Stable under recommended storage conditions

**Possibility of hazardous reactions:** Will not occur under normal conditions.

**Product Name:** Aqua Smarte Plus® Shine  
**Revision Date:** October 1, 2016  
**Supersedes:** Rev 2, 05/22/2015

**Revision:** 3

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

**Incompatible materials:** Halogenated compounds, Cyanides, Heavy metal salts

**Hazardous decomposition products:** Hazardous decomposition products: Oxygen, Sulfur dioxide, Sulfur trioxide

## 11. Toxicological Information

### Potassium Peroxymonosulfate compound:

**Inhalation 4 h LC50** > 5 mg/l, rate

**Skin irritation** Causes burns, rabbit

**Eye irritation** Severe eye irritation, rabbit

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

### Pentapotassium bis(peroxymonosulphate) bis(sulphate):

**Dermal** LD50, rat  
Dose: >2,000 mg/kg

**Oral** LD50, rat  
Dose: 500 mg/kg

**Repeated dose toxicity** Inhalation  
Rat  
Reversible, corneal damage

Oral  
Rat  
Gastrointestinal effects

**Mutagenicity** Did not cause genetic damage in animals.  
Tests on mammalian cell cultures showed mutagenic effects.  
Did not cause genetic damage in cultured bacterial cells.  
Overall weight of evidence indicates that the substance is not mutagenic.

**Teratogenicity** Animal testing showed effects on embryo-fetal development at levels to or above those causing maternal toxicity.

### Dipotassium peroxodisulphate:

**Dermal** LD50, Rabbit

**Product Name:** Aqua Smarte Plus® Shine  
**Revision Date:** October 1, 2016  
**Supersedes:** Rev 2, 05/22/2015

**Revision: 3**

Dose: > 10,000 mg/kg

**Oral** LD50, Rat  
Dose: 802 mg/kg

**Mutagenicity** Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

## 12. Ecological Information

The following ecotoxicological data refer to:

**Pentapotassium bis(peroxymonosulphate) bis(sulphate):**

**96 h LC50** Cyprinodon variegatus (sheepshead minnow) 1.09 mg/L

**72 h ErC50** Algae > 1 mg/L

**48 h EC50** Daphnia 3.5 mg/L

**Dipotassium peroxodisulphate**

**48 h LC50** Daphnia magna (Water flea) 92 mg/L

**Environmental Fate: Pentapotassium bis(peroxymonosulphate) bis(sulphate):**

**Biodegradability:** Readily biodegradable

**Bioaccumulation:** Bioaccumulation is unlikely.

## 13. Disposal Considerations

**Waste Disposal:** Dispose of in accordance with local regulations.

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

## 14. Transportation information

**US DOT:** UN Number: 3260  
Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s.  
(Monopersulfate compound)  
Class: 8  
Packing Group: II  
Labels: 8

**IATA\_C:** UN Number: 3260  
Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s.  
(Monopersulfate compound)  
Class: 8  
Packing Group: II  
Labels: 8

**Product Name:** Aqua Smarte Plus® Shine  
**Revision Date:** October 1, 2016  
**Supersedes:** Rev 2, 05/22/2015

**Revision:** 3

**IMDG:** UN Number: 3260  
Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s.  
(Monopersulfate compound)  
Class: 8  
Packing Group: II  
Labels: 8

### 15. Regulatory information

**TSCS Status** On the inventory, or in compliance with the inventory

**SARA 313 Regulated Chemical(s)** 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.

**Title III hazard classification** Acute Health Hazard: Yes  
Chronic Health Hazard: No  
Fire: No  
Reactivity/Physical hazard: No  
Pressures: No

**California Prop. 65** Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known

**NJ Right to Know Regulated Chemical(s)** Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% for substances identified as carcinogens, mutagens or teratogens): Potassium hydrogensulphate

**Active Compound:** Active Ingredient in this composition is Potassium Peroxymonosulfate, CAS No: 10058-23-8, Concentration 43 – 47%

### 16. Other information

Date of preparation: October 1, 2016

**Details of change from previous version:**

- Updated Corporate Logo

The information in this Safety Data Sheet should be provided to all who 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. Additionally, if this Safety Data Sheet is more than three years old you should contact King Technology to make certain that this sheet is current.

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, King Technology makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its safety and suitability for their purposes prior to use.

In no event will King Technology be responsible for damages of any nature whatsoever resulting from the use of or



## Safety Data Sheet

---

**Product Name:** Aqua Smarte Plus® Shine  
**Revision Date:** October 1, 2016  
**Supersedes:** Rev 2, 05/22/2015

**Revision:** 3

reliance upon information. Factors pertaining to certain conditions of storage, handling, and/or use of this product may involve other or additional safety considerations.

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 INFORMATION REFERS.

**Prepared by:** King Technology, Inc.  
530 11<sup>th</sup> Ave S  
Hopkins, MN 55343 USA  
Phone (952) 933-6118

**End of safety data sheet**