

Product Name: Aqua Smarte Plus™ Optimize
Revision Date: October 1, 2016
Supersedes: Rev 2, 05/22/2015

Revision: 3

1. Identification

Product Identifier: Aqua Smarte Plus™ Optimize

Other Means of Identification: Sodium dichloroisocyanurate ; NaDCCA Dichlor; Sodium dichloro-s-triazinetrione; Chloroisocyanurate

Recommended Use: Swimming pools, spas, hot tubs disinfectant; spa and hot tub shock

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

EPA Registration Number: 53735-12

Emergency Telephone: Chemtrec (800) 424-9300

2. Hazards Identification

GHS Classification: Eye Damage: Category 1
Skin Irritation: Category 2
Oxidizing Solids: Category 2
Specific Target Organ Toxicity (Single Exposure): Category 3
Acute Toxicity (Inhalation): Category 4
Acute Toxicity (Oral): Category 4
Acute Toxicity (Dermal): Category 4

GHS Label Elements:

– **Signal Word:** DANGER

– **Pictograms:**



– **Hazard Statements:** Causes serious eye damage
Causes skin irritation
May intensify fire; oxidizer
May cause respiratory irritation
Harmful if inhaled
Harmful if swallowed
Harmful in contact with skin

– **Precautionary Statements:** Keep away from heat.
Keep away from clothing or other combustible materials.
Take any precaution to avoid mixing with combustibles.
In case of fire: Use large amounts of water to extinguish.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, and eye and face protection.
Wash exposed areas thoroughly after handling.

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Do not eat, drink or smoke when using this product.
In 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.
If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.
If swallowed: Call a poison center or doctor if you feel unwell.
Rinse mouth.
If on skin: Wash with plenty of water.
If skin irritation occurs: Get medical attention.
Call a poison center or doctor if you feel unwell.
Specific treatment (see First-aid Measures on this safety data sheet).
Take off contaminated clothing and wash it before reuse.
Store locked up in a well-ventilated place. Keep container tightly closed.
Dispose of contents and container in accordance with local/regional/national/international regulations.

Unclassified Hazards: None

Percentage of Ingredients with Unknown Toxicity: Zero

3. Composition / Information on Ingredients

Components CAS	Weight %	ACGIH-TLV Data	OSHA (PEL) Data
Sodium dichloroisocyanurate 2893-78-9	33.3	Not Established	Not Established
Citric acid 77-92-9	35.5	10 mg/m3 total dust	15 mg/m3 total dust
Inerts	31.2		

The specific chemical identities 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 the eye. Immediately call a poison control center or doctor for treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. If irritation persists, call a doctor for treatment advice.

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

Ingestion: Call poison control center or doctor immediately for treatment advice. Drink plenty of water in small gulps. Do not induce vomiting unless told to do so by

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the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most Important Symptoms, Acute and Delayed: Causes serious eye damage. Causes skin irritation. May cause respiratory irritation. Harmful if inhaled, swallowed, or in contact with skin.

Immediate Medical Attention Required: If in eyes, immediately call a poison center or doctor. Otherwise, get medical attention if you feel unwell.

5. Fire-fighting Measures

Flash point: Not applicable

Auto-ignition temperature: Not applicable

Suitable Extinguishing Media: Extinguish with large amounts of water.

Unsuitable Extinguishing Media: For safety reasons DO NOT use dry chemical extinguisher containing ammonia compounds, dry chemicals, carbon dioxide, halogenated agents.

Special Protective Equipment and Precautions for Fire-fighters: As in any fire, wear self-contained breathing apparatus with pressure demand (MSHA/NIOSH approved or equivalent) and full protection clothing. Use water spray to cool fire exposed containers.

Specific Hazards Arising From the Chemical: When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride, chlorine, and carbon monoxide.

6. Accidental Release Measures

Personal Precautions: For small spills in well ventilated areas wear respiratory protection and wear clothing, chemical resistant gloves, chemical resistant footwear, and chemical resistant headgear for overhead exposure.

For cleanup of large spills, or small dry spills in confined areas, wear full-face respirator with chlorine cartridges or a positive pressure supplied air respirator. Additionally, body protection should be impervious clothing covering the entire body to prevent personal contact with the material.

Methods for Cleaning Up: If spill material is still dry, do not put water directly on this product as a gas evolution may occur. Do not contaminate spill material with any organic materials, ammonia, ammonium salts, or urea. Clean up all spill material with clean, dry dedicated equipment and place in a clean dry container.

CAUTION: Do not use floor sweeping compounds.

7. Handling and Storage

Handling: Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

Storage: Prevent formation of dust. Keep container tightly closed when not in use.

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Protect from atmospheric moisture and water. Store in a cool, dry, well-ventilated area from heat sources.

8. Exposure Controls and Personal Protection

Exposure Limits – DUST

LIMITS FOR AIR CONTAMINANTS (OSHA)

Particulates not otherwise regulated – total dust – TWA 15 mg/m³

LIMITS FOR AIR CONTAMINANTS (OSHA)

Particulates not otherwise regulated – Respirable fraction – TWA 5 mg/m³

LIMITS FOR AIR CONTAMINANTS (ACGIH)

Particulates (insoluble or poorly soluble) respirable particles – TWA 3 mg/m³

LIMITS FOR AIR CONTAMINANTS (ACGIH)

Particulates (insoluble or poorly soluble inhalable particles) – TWA 10 mg/m³

Appropriate Engineering Controls:

Set up ventilation to effectively remove and prevent buildup of any dust generated from the handling of this product.

Personal protective equipment:

– Respiratory protection:

If ventilation is not sufficient to effectively prevent build up of dust, appropriate NIOSH/OSHA respiratory protection must be provided.

– Hand protection:

Wear chemical resistant gloves, such as rubber, neoprene, or nitrile.

– Eye protection:

Use chemical safety glasses and face shield to avoid eye contact.

– Skin and body protection:

Prevent contact with skin & clothing by using protective garments.

Hygiene measures:

Flowing water source should be available. Avoid contact with skin, eyes, and clothing. Do not inhale dust. Remove soiled or soaked clothing immediately.

9. Physical and Chemical Properties

Appearance: White granular solid
Odor: Chlorine like bleach
Odor threshold: Not available
Melting point / range: Not available
Boiling point / range: Not available
Flash point: Not available
Evaporation rate: Not available
Flammability: Not available
Vapor pressure: Not available
Vapor density: Granular (tap) 1.05 g/ml (pour) 0.958 g/ml
Solubility in water: Not available
Specific gravity: >1
pH: 4.75 (25°C)
Flammability limits: Not available
Partition coefficient: Not available

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Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: Not available

10. Stability and Reactivity

Reactivity: Not reactive under normal conditions.

Chemical stability: Stable under normal conditions.

Incompatible materials: Organic materials; combustible materials; ammonia; ammonium compounds; Alkali. Oxidizing agents; reducing agents; acids. Strong bases, alkali metals, metallic nitrates, oxides of sulfur and potassium tartrate.

Conditions to avoid: Avoid conditions that favor the formation of excessive dust. Avoid excessive heat and sources of ignition. Avoid conditions of moisture.

Hazardous decomposition products: Nitrogen. HCl gas. Chlorine gas. Isocyanic acid. Metal oxide. Nitrogen trichloride. Carbon oxides.

Possibility of hazardous reactions: Will not occur

11. Toxicological Information

No information available.

12. Ecological Information

Adverse effects: Toxic to fish and aquatic life forms. Do not dispose by drainage or into lakes, ponds or public water.

13. Disposal Considerations

Waste disposal: Observe all federal, state, and local regulations. The responsibility for proper waste disposal is with the owner of the waste.

14. Transportation Information

US DOT: Class: 5.1 – Oxidizing substances
Packing Group: II
Label: OXIDIZER (5.1)
UN/NA number: UN2465
Proper shipping name: Dichloroisocyanurate acid, dry, mixture

Transport IMDG: Class: 5.1 – Oxidizing substances
Packing Group: II
UN number: UN2465
Proper shipping name: Dichloroisocyanurate acid, dry, mixture
EmS: F-A+S-Q

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Label: OXIDIZING AGENT (5.1)
Marine pollutant mark: Symbol "fish and tree"

Transport ICAO/IATA: Class: 5.1
Packing Group: II
UN number: UN2465
Proper shipping name: Dichloroisocyanurate acid, dry, mixture
Label: OXIDIZER (5.1)

15. Regulatory Information

US Federal Regulations:

EPA FIFRA Information: This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER
Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through skin. May be fatal if inhaled. Do not breathe dust or vapors. Irritating to nose and throat. Do not get in eyes, on skin or on clothing. Wear goggles or face shield, protective clothing and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the restroom. Remove and wash contaminated clothing before reuse.

-Toxic Substances Control Act (TSCA): Hazardous Component(s) subject to reporting on the TSCA List.

-HMIS Classification: Health = 3
Flammability = 1
Reactivity = 0
PPE = F

-NFPA Rating: Health = 3
Fire Hazard = 1
Reactivity = 0

- WHMIS hazard class: Hazardous Components(s) subject to WHMIS Ingredient Disclosure

16. Other information

Date of preparation: October 1, 2016

Details of change from previous version:

- Updated Corporate Logo

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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 Material Safety Data Sheet is more than three years old you should contact King Technology to make certain that this sheet is current.

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End of safety data sheet