

# SANI-POWDER/ECA 500

## SAFETY DATA SHEET

### 1. IDENTIFICATION

**Product identifier:** Sani-Powder/ECA 500

**EPA Registration Number:** 91138-1

**Recommended use:** Algaecide, Disinfectant, Sanitizer, Bactericide, Fungicide, Microbiocide/microbiostat

**Restrictions on use:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**Manufacturer:** ECA Water Systems, LLC  
136 Bus Terminal Road  
Oak Ridge, TN 37830

**Telephone number:** 1 865-207-6545

**Emergency phone number:** 1 865-207-6545 (9 AM – 5 PM, M-F)

### 2. HAZARD(S) IDENTIFICATION

#### Classification:

Physical	Health
Not Hazardous	Acute Oral Toxicity Category 4 Acute Inhalation Toxicity Category 2 Skin Corrosion Category 1C Eye Damage Category 1 Specific Target Organ Toxicity Single Exposure Category 3

#### OSHA/GHS Labeling: DANGER



#### Hazard statement(s)

Harmful if swallowed.

Fatal if inhaled

Causes severe skin burns and eye damage.

May cause respiratory irritation

#### Prevention

Do not breathe dust.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area  
Do not eat, drink or smoke when using this product.

Wear protective gloves, protective clothing, eye protection and face protection

In case of inadequate ventilation wear respiratory protection.

#### Disposal

Dispose of contents and container in

#### Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor.

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.

#### Storage:

Keep container tightly closed. Store locked up.

accordance with local and national regulations.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No	Concentration
Sodium Dichloroisocyanurate Dihydrate	51580-86-0	99%
Non-Hazardous Ingredients	Proprietary	1%

### 4. FIRST-AID MEASURES

**Inhalation:** If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

**Skin Contact:** Wash thoroughly with water for 15 minutes. Seek immediate medical attention.

**Eye Contact:** Rinse cautiously with water for 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

**Ingestion:** Do NOT induce vomiting. If the victim is fully conscious, have them rinse mouth with water. Seek immediate medical attention. Never give anything by mouth to a person who is unconscious or drowsy.

**Most Important symptoms and effects, both acute and delayed:** Fatal if inhaled. Inhalation of dust may cause irritation of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure. Dermal exposures along with moisture may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns. Repeated and prolonged skin contact may cause a dermatitis. Causes serious eye damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye. Harmful if swallowed. Exposure by ingestion may cause irritation, nausea, and vomiting. May cause local tissue damage to esophagus and stomach such as burning, inflammation, local ulceration, and may cause gastrointestinal bleeding.

**Indication of any immediate medical attention and special treatment needed:** Immediate medical attention is required for all routes of exposure.

Note to physician: Treat as a corrosive substance. This material is more irritating to the skin and eyes in the presence of water. For prolonged exposures and significant exposures, consider delayed injury to exposed tissues. There is no antidote. Cyanuric acid is readily removed from the body via the renal system, and is not bio-accumulated. Treatment is supportive care. Follow normal parameters for airway, breathing, and circulation.

### 5. FIRE-FIGHTING MEASURES

**Suitable (and unsuitable) extinguishing media:** Flood with copious amounts of water. Do not use ABC fire extinguishers. Do not use dry chemicals, carbon dioxide, or halogenated extinguishing agents.

**Specific hazards arising from the chemical:** If heated by outside source to temperatures above 240 °C (464 °F), this product will undergo decomposition with the evolution of noxious gases but no visible flame. When ignited will burn with the evolution of chlorine and equally toxic gases. Contaminated or wet product may act as an oxidizer and intensify fire potential. Wet material may generate nitrogen trichloride, an explosion hazard.

**Special protective equipment and precautions for fire-fighters:** Move container from fire area if it can be done without risk. Material which appears undamaged except for being damp on the outside, should be opened

and inspected immediately. DO NOT attempt to reseal contaminated drums. Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:** Isolate the area and keep unnecessary personnel away. Stay upwind and keep out of low areas. Wear appropriate protective clothing and equipment (see section 8). Prevent contact with skin, eyes and clothing. Do not breathe dust or gas.

**Environmental precautions:** Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations.

**Methods and materials for containment and cleaning up:** DO NOT add water to spilled material. DO NOT use floor sweeping compounds to clean up spills. Sweep and scoop spilled material into clean, dedicated equipment. Every attempt should be made to avoid mixing spilled material with other chemicals or debris when cleaning up. DO NOT attempt to reseal contaminated drums. DO NOT transport wet or damp material. Damp material should be neutralized to a non-oxidizing state. Contact manufacturer for instructions for handling and disposal of damp material.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Prevent eye and skin contact. Do not breathe dust or gas. Avoid creation of dust. Wash exposed skin thoroughly with soap and water after use. Wear appropriate protective clothing and equipment (see section 8). Do not eat, drink, or smoke when using this product.

NEVER add water to this product. Always add product to large quantities of water. Use clean, dry utensils. Do not add the product to any dispensing device containing residuals of other products. Read and follow product use instructions.

Do not reuse empty containers. Empty containers retain product residue and may be dangerous. Follow all SDS guidelines when handling empty containers.

**Conditions for safe storage, including any incompatibilities:** Store and handle in accordance with all current regulations and standards. (NFPA Oxidizer Class 1). Store in original container and in a dry area where temperatures do not exceed 52 °C (125 °F) for 24 hours. Keep container tightly closed. Do not allow water to get in container. If liner is present, tie after each use. Keep container tightly closed and properly labeled. Store locked up, away from incompatible materials: acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, and organic solvents and compounds.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines:

Sodium Dichloroisocyanurate Dihydrate	None Established
---------------------------------------	------------------

**Appropriate Engineering Controls:** Use only in well-ventilated areas. Provide local exhaust ventilation where dust may be generated. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Respiratory Protection:** Wear an approved respirator (mask) with appropriate eye protection. A full face piece respirator provides both eye and respiratory protection. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with all applicable regulations; and good Industrial Hygiene practice.

**Hand Protection:** Wear appropriate chemical resistant gloves.

**Skin Protection:** Wear protective clothing to minimize skin contact. When potential for contact with material exists, wear disposable coveralls suitable for dust exposure. Contaminated clothing should be removed and laundered before reuse.

**Eye Protection:** Wear chemical safety goggles and face shield.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	White, Compact solid and granular particles
<b>Odor:</b>	Slight chlorine
<b>Odor Threshold:</b>	Not determined
<b>pH:</b>	6-7 (1% solution)
<b>Melting/Freezing Point:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable
<b>Flash Point:</b>	Not applicable
<b>Evaporation Rate: (n-butylacetate =1)</b>	Not applicable
<b>% Volatile by Volume:</b>	Not applicable
<b>Lower Flammability Limit: Upper Flammability Limit:</b>	Not applicable
<b>Vapor Pressure:</b>	Not applicable
<b>Vapor Density(Air=1):</b>	Not applicable
<b>Solubility:</b>	Soluble in water
<b>Autoignition Temperature:</b>	Not determined
<b>Decomposition Temperature:</b>	225-250°C (437-482°F)
<b>Viscosity:</b>	Not applicable
<b>Explosive Properties:</b>	Wet material may generate nitrogen trichloride, an explosion hazard.
<b>Oxidizing Properties:</b>	Oxidizing Solid
<b>Specific Gravity (H<sub>2</sub>O= 1):</b>	1.59

## 10. STABILITY AND REACTIVITY

**Reactivity:** Not reactive under normal temperatures and pressures.

**Chemical Stability:** Stable at normal temperatures and pressures.

**Possibility of Hazardous Reactions:** None expected.

**Conditions to Avoid:** Incompatible materials.

**Incompatible Materials:** Do not get water inside container. Wet material may generate nitrogen trichloride, an explosion hazard. Avoid contact with easily oxidizable organic material. Contact with acids liberates toxic gas.

**Hazardous Decomposition Products:** Chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, and phosgene.

## 11. TOXICOLOGICAL INFORMATION

**Acute effects of exposure:**

**Inhalation:** Fatal if inhaled. Inhalation of dust may cause irritation of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.

**Ingestion:** Harmful if swallowed. Exposure by ingestion may cause irritation, nausea, and vomiting. May cause local tissue damage to esophagus and stomach such as burning, inflammation, local ulceration, and may cause gastrointestinal bleeding.

**Skin contact:** Dermal exposures along with moisture may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns. Repeated and prolonged skin contact may cause a dermatitis. Not a skin sensitizer.

**Eye contact:** Causes serious eye damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye

**Chronic effects:** None known

**Carcinogenicity:** None of the components are listed as a carcinogen or potential carcinogen by IARC, NTP or OSHA

**Germ cell mutagenicity:** Not mutagenic in 5 Salmonella strains and 1 E. coli strain with or without mammalian microsomal activation

**Reproductive Toxicity:** No adverse effects on reproduction are known.

**Numerical measures of toxicity:**

Sodium Dichloroisocyanurate Dihydrate: LD50 Oral Rat: 1823 mg/kg; LD50 Skin Rat: >5000 mg/kg; LC50 Inhalation Rat: >0.27 - <1.17 mg/L/4 hr.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Very toxic to aquatic life with long lasting effects.

Sodium Dichloroisocyanurate Dihydrate: LC50 rainbow trout 0.25-1.0 mg/L/96 hr. EC50 daphnia magna 0.196 mg/L/48 hr.

**Persistence and degradability:** This material is subject to hydrolysis. Cyanuric acid produced by hydrolysis is biodegradable.

**Bioaccumulative potential:** This material hydrolyses in water liberating free available chlorine and cyanuric acid. These products are not bioaccumulative.

**Mobility in soil:** No data available.

**Other adverse effects:** This product is very toxic to fish and aquatic organisms. This product is very toxic to aquatic life with long lasting effects. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of appropriate regulatory requirements (e.g. permit and the permitting authority has been notified in writing prior to discharge). Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your local or regional regulatory water boards and/or other appropriate regulatory offices.

## 13. DISPOSAL CONSIDERATIONS

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative at the nearest EPA Regional Office for guidance. The preferred disposal methods are incinerate or chemical treatment in accordance with Federal, State and Local regulations. DO NOT put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible materials could cause a reaction and fire. DO NOT transport wet or damp material.

**Container Management:**

See product label for container disposal information. Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container rinsate must be disposed of in compliance with applicable regulations.

**14. TRANSPORT INFORMATION**

This product is not regulated unless transported in bulk or by vessel. For bulk packages and vessel transport, the following applies:

**UN number:** UN3077

**Proper shipping name:** Environmentally Hazardous Substances, solid, n.o.s. (Sodium Dichloroisocyanurate Dihydrate)

**Transport hazard classes(es):** 9

**Packing group, if applicable:** III

**Environmental hazards:** Marine Pollutant

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable.

Transported in packaged form only.

**Special precautions:** None known

**15. REGULATORY INFORMATION**

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

**FIFRA Labeling:** DANGER CORROSIVE: Causes irreversible eye damage and skin burns. Harmful if swallowed. Avoid breathing dust and fumes. Irritating to nose and throat. Do not get in eyes, on skin or clothing. Wear protective eyewear (safety glasses or goggles). Wear 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 toilet. Remove and water contaminated clothing before reuse.

Strong oxidizing agent. Contact with water slowly liberates irritating and hazardous chlorine containing gases. Decomposes at temperatures above 464°F with liberation of harmful gases. When ignited, will burn with the evolution of chlorine and equally toxic gases. NEVER add water to product. Always add product to large quantities of water. Use only clean and dry utensils. DO NOT add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic material, or other incompatible chemicals may start a reaction with generation of heat, liberation of hazardous gases, and possible fire and explosion

**Safety, health, and environmental regulations specific for the product in question.**

**CERCLA:** Not regulated.

**SARA Hazard Category (311/312):** Fire Hazard, Reactive Hazard, Acute Health Hazard

**SARA 313:** Not regulated

**EPA TSCA Inventory:** This product is a pesticide and not subject to TSCA. Not subject to export notification.

**CANADA:**

**Canadian CEPA:** All components of this product are listed on either the DSL or the NDSL.

<b>16. OTHER INFORMATION</b>
------------------------------

**SDS Revision History:** New SDS

**Date of preparation:** August 31, 2016

**Date of previous revision:** New SDS

**NOTICE**

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. ECA Water Systems, LLC shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.