

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

<b>GHS Product identifier:</b>	Sanygen Chlorine Neutralizer
<b>Other means of identification:</b>	Item codes: S-R3-5, S-R3-50
<b>Synonyms:</b>	Sodium thiosulfate pentahydrate; Thiosulfate; Prismatic rice;
<b>Recommended use:</b>	Lowers the chlorine level in swimming pools and spas/hot tubs.
<b>Restriction on Use:</b>	None known.
<b>Manufacturer:</b>	Address: Miami Products & Chemical Co. 520 Lonoke St. Dayton, OH 45403 Tel: (800) 776-1313 Fax: (937) 253-1559
<b>24 Hour Emergency Telephone Number:</b>	CHEMTREC: (800) 424-9300 within the United States CHEMTREC: (703) 527-3887 if international CHEMTREC Contract No: CCN14419

### SECTION 2: HAZARD IDENTIFICATION

**OSHA REGULATORY STATUS:** This material is NOT considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### GHS label elements, including precautionary statements

This product contains no substances which at their given concentration, are considered to be hazardous to health.

**Hazards not otherwise classified (HNOC) or not covered by GHS:** None identified.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Common Chemical Name	Percent (%)	CAS Number
Sodium thiosulfate pentahydrate	> 98	10102-17-7

**Formula:**  $\text{Na}_2\text{O}_3\text{S}_2 \cdot 5\text{H}_2\text{O}$

**Molecular Weight:** 248.48 g/mol

### SECTION 4: FIRST-AID MEASURES

**General advice:** If in immediate danger, move out of the affected areas. Show this Safety Data Sheet (SDS) to the attending medical personnel and make sure they are aware of the material(s) involved.

- Inhalation:** Remove person to fresh air. If breathing difficulty or discomfort occurs and persists, seek medical attention.
- Skin Contact:** Remove contaminated clothing. Wash all affected areas with plenty of soap and water for at least 15 minutes. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
- Eye Contact:** Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. After the first 5 minutes of flushing remove contact lenses, if present and easy to do, and continue rinsing. If irritation persists, repeat flushing. Seek medical attention.
- Ingestion:** Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. If irritation persists, seek medical attention.

**Most Important Symptoms and Effects (Both Acute and Delayed)**

- Acute Symptoms/Effects:** May irritate the skin. May cause irritation to the eyes. May irritate the respiratory tract. Reacts with acids to form toxic and irritating sulphur dioxide gas.
- Delayed Symptoms/Effects:** None known.

**Medical Conditions Aggravated by Exposure:** None known.

**Protection of First-Responders:** Protect yourself by avoiding contact with this material. Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. Use personal protective equipment (PPE). Refer to Section 8 for specific personal protective equipment recommendations.

**Notes to Physician:** Treatment is symptomatic and supportive.

**SECTION 5: FIRE-FIGHTING MEASURES**

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

**Specific hazards arising from the chemical:** None known.

**Special protective actions for fire-fighters:** Firefighters should wear protective equipment and NIOSH approved self-contained breathing apparatus (SCBA) with full face piece operated in positive pressure mode in a fire involving this material. Use standard firefighting procedures and consider the hazards of other involved materials. Use a water spray to keep fire-exposed containers cool, and to knock down vapors and gases.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Avoid dust formation. Avoid breathing vapors or dust. Wear the appropriate personal protective equipment (PPE). Isolate the spill area to prevent non-essential personnel from entering the contaminated area.

**Environmental precautions:** Do not discharge into drains, sewers, water courses or onto the ground.

**Methods and materials for containment and cleaning up:** See Section 8: Exposure Controls/Personal Protection for recommended personal protective equipment (PPE). Ventilate area of leak or spill. Promptly shovel or sweep up material with minimum dusting and shovel into an empty container with a cover. Be sure that the container is properly labeled. Vacuuming or wet sweeping may be used to avoid dust dispersal. Clean spill area with plenty of water.

*Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 "Regulatory Information" regarding reporting requirements.*

## SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling:** Use air conveying/mechanical systems for bulk transfer to storage. For manual handling of bulk transfer, use mechanical ventilation to remove airborne dust from railcar, ship or truck. Use approved respiratory protection when ventilation systems are not available. Selection of respirator is based on the dust cloud generated. Keep material out of lakes, stream, ponds and sewer drains.

**Conditions for safe storage:** Store this product in a cool, dry area away from acidic compounds and oxidizing agents. Store in original container and keep this container tightly closed at all times when not in use.

**Incompatibilities/conditions to avoid:** Strong oxidizers: causes vigorous exothermic reactions. Acids: releases sulfur dioxide and/or hydrogen sulfide gas.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational exposure limit(s):** This product, as supplied, does NOT contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls:** Where possible, provide general mechanical and/or local exhaust ventilation to prevent the release of airborne dust into the work environment.

### **Individual protection measures, such as personal protective equipment (PPE)**

**Eye/face protection:** Appropriate eye and face protection equipment (ANSI Z87 approved) should be selected for the particular use intended for this material. Safety glasses with side shields are recommended.

**Skin protection:** Dry product is generally non-irritating to intact skin. However, this product can be irritating to skin that has been damaged (cuts, abrasions, sunburn, etc.) and can create skin irritation after long exposures when moisture is present. Under such conditions, gloves and long-sleeved clothing are recommended to minimize skin contact.

**Respiratory protection:** Whenever dust in the worker's breathing zone cannot be controlled with ventilation or other engineering means, workers should wear respirators or dust masks approved by NIOSH, EU or other comparable certification organizations to protect them against airborne dust.

**Thermal hazards:** Not applicable.

**General hygiene practices:** It is important to observe good personal hygiene measures, which should include washing immediately after handling this product and before eating, drinking, smoking, chewing gum, or using the toilet. Routinely wash work clothing to remove any residual contaminants.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Color	Clear granules or crystals
Odor	Odorless
Odor threshold	No data available
pH	~8.6 (7.5% solution; anhydrous)
Melting point/freezing point	48° C (118° F)
Initial boiling point and boiling range	Not applicable
Flash point	Not combustible
Evaporation rate	Not applicable
Flammability limit – lower (%)	Not applicable
Flammability limit – upper (%)	Not applicable
Explosive limit – lower (%)	Not applicable
Explosive limit – upper (%)	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Relative density	1.685 (water = 1.0)
Solubility(ies)	52 weight % at 0° C (32° F)
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Viscosity	Not applicable

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Under normal handling and storage conditions, this product is not reactive.

**Chemical stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** This product reacts with acids to form toxic and irritating sulfur dioxide gas. It also reacts with strong oxidizers to cause vigorous exothermic reactions, which release large amounts of heat.

**Conditions to avoid:** Avoid elevated temperatures.

**Incompatible materials:** Acidic compounds and strong oxidizers.

**Hazardous decomposition products:** Sulfur dioxide gas, hydrogen sulfide gas and sodium sulfide residue.

**Hazardous polymerization:** Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

### TOXICITY DATA

Component	Method	Species	Dose
Sodium thiosulfate pentahydrate 10102-17-7	LD <sub>50</sub> (Intraperitoneal)	Mouse	5,600 mg/kg
	LD <sub>50</sub> (Intravenous)	Mouse	2,350 mg/kg
	LDLo	Dog-adult	3,000 mg/kg
	LD <sub>50</sub> (Intravenous)	Rat	> 2,500 mg/kg

### Information on likely routes of exposure

- Ingestion:** Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause local mucosal damage to esophagus and stomach.
- Inhalation:** Dust may cause irritation to upper respiratory tract (nose and throat.)
- Skin contact:** Brief contact is essentially non-irritating to the skin. Prolonged exposure may cause skin irritation. Sodium thiosulfate pentahydrate is not classified as corrosive to the skin according to DOT guidelines.
- Eye contact:** May cause a slight eye irritation. Dust formation should be avoided because dust can cause eye irritation.

# MIAMI PRODUCTS & CHEMICAL CO.

## SAFETY DATA SHEET

SDS ID: SR3

Revision Date: April 22, 2015

Revision No.: 1

**Symptoms related to the physical, chemical and toxicological characteristics:** Eye irritation and possible skin irritation with long exposure times.

**Skin corrosion/irritation:** Slight irritation. Prolonged contact may cause more severe symptoms. Damage is localized to contact areas.

**Serious eye damage/eye irritation:** Eye irritation.

**Respiratory sensitization:** Inhaling dust may cause irritation to upper respiratory tract (nose and throat).

**Skin sensitization:** No data available.

**Germ cell mutagenicity:** Not classified as a mutagen per GHS criteria.

### **Carcinogenicity**

**IARC:** No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

**ACGIH:** No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

**OSHA:** No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Not classified as a reproductive toxin per GHS guidelines.

**Specific target organ toxicity – single exposure:** No data available.

**Specific target organ toxicity – repeated exposure:** No data available.

**Aspiraton hazard:** No data available.

**Chronic effects:** None known.

## **SECTION 12: ECOLOGICAL INFORMATION**

### **ECOTOXICITY DATA**

Common Chemical Name	Method	Species	Dose	Duration
Sodium thiosulfate pentahydrate	LC <sub>50</sub>	<i>Daphnia magna</i>	520 mg/L	48 hours
	LC <sub>50</sub>	Western mosquitofish	24,000 mg/L	96 hours

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

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

**Other adverse effects:** None known.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

**Disposal methods:** Collect and reclaim or dispose in sealed containers at a licensed waste disposal site. This material and its container must be disposed of as a hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.

**Waste from residues / unused products:** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. See Disposal methods.

**Contaminated packaging:** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### **SECTION 14: TRANSPORT INFORMATION**

This product is not regulated.

### **SECTION 15: REGULATORY INFORMATION**

#### **U.S. REGULATIONS:**

- **OSHA REGULATORY STATUS:** This material is NOT considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- **SARA 302 COMPONENTS:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- **SARA 313 COMPONENTS:** 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.
- **SARA 311/312 HAZARDS:** No SARA hazards.

#### **NATIONAL INVENTORY STATUS:**

- **U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA):** All components are listed or exempt.
- **Canadian Chemical Inventory:** All components of this product are listed on either the DSL or the NDSL.

**STATE REGULATIONS:**

- **California Proposition 65:** This product does not contain any Proposition 65 chemicals.

**SECTION 16: OTHER INFORMATION**

SDS Preparation Date:	April 22, 2015
SDS Revision Date:	April 22, 2015
SDS Revision No.:	1

**REASONS FOR REVISION:**

- Updated SDS header
- Changed the SDS format to meet the GHS requirements of the revised 2012 OSHA HCS (29 CFR 1910.1200)
- Product identifier has been added or updated (See Section 1)
- Revised Hazards Identification information (See Section 2)
- Added GHS Information (See Section 2)
- Updated First-Aid Measures (See Section 4)
- Updated Fire Fighting Measures (See Section 5)
- Revised Accidental Release Measures (See Section 6)
- Revised Handling and Storage Recommendations (See Section 7)
- Updated Exposure Controls/Personal Protection (Section 8)
- Updated Physical and Chemical Properties (See Section 9)
- Updated Stability and Reactivity (Section 10)
- Updated Toxicological Information (Section 11)
- Updated Ecological Information (Section 12)
- Updated Disposal Considerations (See Section 13)
- Updated Regulatory Information ( See Section 15)
- Added SDS Preparation Date, SDS Revision Date, and SDS Revision No. (See Section 16)
- Added "End of SDS Document" phrase
- Added a list of abbreviations that may have been used in the SDS

**ABBREVIATIONS (please note that not all abbreviations may appear on this SDS):**

**ACGIH** = American Conference of Governmental Industrial Hygienist  
**CAS** = Chemical Abstract Service  
**CERCLA** = Comprehensive Environmental Response, Compensation, and Liability Act  
**CFR** = Code of Federal Regulations  
**DOT** = Department of Transportation (United States)  
**DSL/NDSL** = Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** = European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**EN** = European Norm  
**EPCRA** = Emergency Planning & Community Right to Know Act (1986)  
**EU** = European Union  
**GHS** = Global Harmonization System



# MIAMI PRODUCTS & CHEMICAL CO.

## SAFETY DATA SHEET

SDS ID: SR3

Revision Date: April 22, 2015

Revision No.: 1

**HMIS** = Hazardous Materials Information System  
**IARC** = International Agency for Research on Cancer  
**IATA** = International Air Transport Association  
**IDLH** = Immediately Dangerous to Life or Health  
**IMDG** = International Maritime Dangerous Goods (Code)  
**ICAO** = International Civil Aviation Organization  
**NFPA** = National Fire Protection Association  
**NIOSH** = National Institute for Occupational Safety and Health  
**N.O.S.** = Not Otherwise Specified  
**NTP** = National Toxicology Program  
**OSHA** = Occupational Safety and Health Administration  
**PBT** = Persistent Bioaccumulative and Toxic  
**PEL** = Permissible Exposure Limit  
**pH** = A measure of the acidity or alkalinity of a solution  
**PSM** = Process Safety Management  
**RQ** = Reportable Quantity  
**SARA** = Superfund Amendments and Reauthorization Act  
**SDS** = Safety Data Sheet  
**STOT** = Specific Target Organ Toxicity  
**TLV** = Threshold Limit Value  
**TSCA** = Toxic Substance Control Act  
**TWA** = Time-weighted Average  
**UN** = United Nations

**DISCLAIMER:** This SDS generally complies with the requirements set forth in 29 CFR 1910.1200 and Annex 5, Fifth Edition (2014) Globally Harmonized System of Classification and Labeling of Chemicals (GHS). 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, Miami- Products & Chemical Co. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Miami Products & Chemical Co. be responsible for damages of any nature whatsoever resulting from the use of, misuse or reliance upon information. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure its activities comply with federal, State, Provincial, and local laws and regulations.

The information contained in this SDS is subject to revision as additional knowledge, information, and experience is gained.

**END OF SDS DOCUMENT**