

MIAMI PRODUCTS & CHEMICAL CO.

SAFETY DATA SHEET

SDS ID: SX5
Revision Date: April 28, 2015
Revision No.: 1

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

GHS Product identifier:	Sanygen All Purpose Cleaner TSP
Other means of identification:	Item codes: S-X5-5 S-X5-50
Synonyms:	TSP; Trisodium phosphate, Trisodium phosphate dodecahydrate
Recommended use:	General cleaner for swimming pool equipment.
Restriction on Use:	None known.
Manufacturer:	Address: Miami Products & Chemical Co. 520 Lonoke St. Dayton, OH 45403 Tel: (800) 776-1313 Fax: (937) 253-1559
24 Hour Emergency Telephone Number:	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 considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Classification in accordance with 29 CFR 1910 (GHS HCS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity-single exposure	Category 3; Respiratory tract irritant

GHS label elements, including precautionary statements



Signal Word: WARNING

GHS Hazard Statements:

Physical hazard statements: Not applicable.

MIAMI PRODUCTS & CHEMICAL CO.

SAFETY DATA SHEET

SDS ID: SX5

Revision Date: April 28, 2015

Revision No.: 1

Health hazard statements: H315: Causes skin irritation
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Environmental hazard Statements: Not applicable.

GHS Precautionary Statements:

General Precautionary Statements: P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.

Prevention Precautionary Statements: P261: Avoid breathing dust.
P264: Wash all affected areas thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves and eye/face protection.

Response Precautionary Statements: P302+P352: IF ON SKIN: Wash with plenty of water.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313: If skin irritation occurs: Get medical attention.
P337+P313: If eye irritation persists: Get medical attention.
P321: Specific treatment (see First Aid information on product label and/or Section 4 of the SDS).
P362: Take off contaminated clothing and wash before reuse.
P312: Call a POISON CENTER or physician if you feel unwell.

Storage Precautionary Statements: P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.

Disposal Precautionary Statements: P501: Dispose of contents/container in accordance with local, regional, and national regulations.

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Common Chemical Name	Percent (%)	CAS Number
Trisodium phosphate dodecahydrate	98-100	10101-89-0

Formula: $\text{Na}_3\text{O}_4\text{P} \cdot 12\text{H}_2\text{O}$
Molecular Weight: 380.12 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: Move the effected person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration. If breathing is difficult, give oxygen. Get medical attention for any irritation or discomfort.

Skin Contact: Remove contaminated clothing. Flush skin with plenty of fresh water for at least 15 minutes. If irritation persists, seek medical attention. Be sure to wash all contaminated clothing before reuse.

Eye Contact: Immediately flush with plenty of fresh water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes and then continue rinsing eyes. Seek medical attention immediately.

Ingestion: If the effected person is able to swallow, have them sip a glass of water. DO NOT Induce vomiting. DO NOT give anything by mouth to an unconscious person. Call a poison control center or physician for medical advice.

Most Important Symptoms and Effects (Both Acute and Delayed)

Acute Symptoms/Effects: Serious eye irritation with symptoms such as stinging, tearing, and redness.

Delayed Symptoms/Effects: No data available.

Medical Conditions Aggravated by Exposure: May aggravate pre-existing conditions such as: eye disorders that decrease tear production or have reduced integrity, skin disorders that compromise the integrity of the skin and respiratory conditions including asthma and other breathing disorders.

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. Ingestion of large quantities of phosphate salts (more than 1.0 grams for an adult) may cause an osmotic catharsis resulting in diarrhea and probable abdominal cramps. Larger doses such as 4-8 grams will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will be excreted in the feces with diarrhea and, thus, not cause any systemic toxicity. Doses greater than 10 grams hypothetically may cause systemic toxicity. Treatment should take into consideration both the anionic and cationic portion of the molecule.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media: Non-combustible. Use extinguishing method suitable for surrounding fire. Water, dry chemical, chemical foam, or alcohol-resistant foam are all acceptable.

Specific hazards arising from the chemical: Oxides of phosphorus, Sodium oxides.

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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (PPE).

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 of this SDS on suitable and unsuitable materials. See also the information in "For non-emergency personnel."

Environmental precautions: While this product is not believed to be an environmental hazard, do not discharge into drains, sewers, water courses or onto the ground. This material is acidic and may decrease the pH of the surface waters with low buffering capacity. The appropriate agencies must be informed of all significant releases.

Methods and materials for containment and cleaning up:

Small Spill: Ensure that the personnel conducting the cleanup are outfitted with the appropriate personal protective equipment, including safety glasses, gloves, and suitable body protection. If dust is present, appropriate respiratory protection should be used too. Use appropriate tools to put the spilled solid in a convenient waste disposal container. Make sure that the container containing the spilled material is properly labeled. Finish cleaning the contaminated area by spreading water on the contaminated surface and then dispose of according to local and regional authority requirements.

Large Spill: Evacuate the contaminated areas and make sure that non-essential personnel are not near the affected area(s). Keep people upwind of the spilled material. Isolate the spill area to prevent people from entering the area. Keep materials which burn away from spilled material. Notify the appropriate authorities/agencies. Ensure that the personnel conducting the cleanup are outfitted with the appropriate personal protective equipment, including safety glasses, gloves, and suitable body protection. If dust is present, appropriate respiratory protection should be used too. Use a shovel to put the material into a convenient waste disposal container. Make sure that the container containing the spilled material is properly labeled. Finish cleaning the contaminated area by spreading water on the contaminated surface and then dispose of according to local and regional authority requirements.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled. Wear appropriate personal protective equipment (PPE). People working with this chemical should be properly trained regarding its hazards and its safe use. Avoid generating dust. Use smallest possible amounts in designated areas with adequate ventilation. Keep containers closed when not in use. Empty containers may contain hazardous residues. Use corrosion-resistant transfer equipment when dispensing. Wash all affected areas thoroughly after handling.

Conditions for safe storage: Store in a cool, dry, well-ventilated area, out of direct sunlight and away from intense heat and/or ignition sources. If possible, store in the original container. If this is not possible, store this material in a corrosion resistant container with a corrosion resistant inner liner. Keep containers tightly closed when not in use and when empty. Protect from damage. Be sure that all storage containers are clearly marked and properly labeled.

Incompatibilities/conditions to avoid: Avoid contact with strong acids. Avoid contact with magnesium. This product could be corrosive to aluminum surfaces because of its high pH.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit(s): As listed below

Common Chemical Name	ACGIH-TLV Data	OSHA (PEL) Data
Trisodium phosphate dodecahydrate	10 mg/m ³ (inhalable); 8-hr TWA	15 mg/m ³ (total dust); 8-hr TWA
	3 mg/m ³ (respirable); 8-hr TWA	5 mg/m ³ (respirable); 8-hr TWA

Appropriate engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Use a corrosion-resistant ventilation system and exhaust directly to the outside. Please refer to the ACGIH document, *Industrial Ventilation, a Manual of Recommended Practices*, most recent edition, for details.

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

- Eye/face protection:** Wear splash resistant chemical goggles and full face shield. Maintain eye wash fountain and quick-drench facilities in work area.
- Skin protection:** Wear impervious protective clothing, including boots, gloves, lab coat, apron, rain jacket, pants or coveralls, as appropriate, to prevent skin contact. To protect the hands, use neoprene gloves with a minimum thickness of 0.67 millimeters (mm).
- Respiratory protection:** When dusty conditions are encountered, wear a NIOSH/OSHA full-face respirator with chlorine cartridges for protection against chlorine gas and dust/mist pre-filter. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.
- 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	White crystals
Odor	Odorless
Odor threshold	No data available
pH	13.0 @ 190.1 g/L @ 25° C (77° F)
Melting point/freezing point	73.0° C (166° F)
Initial boiling point and boiling range	Not applicable
Flash point	Not flammable
Evaporation rate	No data available
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	1.62 g/mL @ 25° C (77° F)
Solubility(ies)	28g/100 mL water @ 15° C (59 ° 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: No data available.

Chemical stability: Stable under normal handling and storage conditions.

Possibility of hazardous reactions: Under normal storage and handling conditions, hazardous reactions will not occur.

Conditions to avoid: Dusting conditions and moisture.

Incompatible materials: Avoid contact with strong acids. Avoid contact with magnesium. This product could be corrosive to aluminum surfaces because of its high pH.

Hazardous decomposition products: Oxides of phosphorus, Sodium oxides.

Hazardous polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICITY DATA

Common Chemical Name	Method	Species	Dose
Trisodium phosphate dodecahydrate	LD ₅₀ (oral)	Rat	7,400 mg/kg
	LD ₅₀ (intraperitoneal)	Mouse	430 mg/kg
	LD ₅₀ (skin)	Rabbit	> 7,940 mg/kg

Information on likely routes of exposure

Ingestion: Not a likely route of exposure in a workplace setting. Small amounts (tablespoonful) are not likely to cause injury; however, swallowing large amounts may irritate or burn digestive tract.

Inhalation: Inhalation of dust may irritate the nose, throat and/or lungs.

Skin contact: Prolonged exposure may cause skin irritation.

Eye contact: May cause serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics: Eye irritation and possible skin irritation with long exposure times. This product may also cause irritation of the nose, throat, and respiratory tract.

Skin corrosion/irritation: Slight irritation. Prolonged contact may cause more severe symptoms such as dermatitis (red, itchy skin). Damage is localized to contact areas.

MIAMI PRODUCTS & CHEMICAL CO.

SAFETY DATA SHEET

SDS ID: SX5

Revision Date: April 28, 2015

Revision No.: 1

Serious eye damage/eye irritation: Eye irritation. Corneal eye pain, redness, acute corneal thickening or whitening upon contact.

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

Skin sensitization: No data available.

Germ cell mutagenicity: Not suspected of being a mutagen.

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: No data available.

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: No data available.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY DATA

Component	Method	Species	Dose	Duration
Trisodium phosphate dodecahydrate	EC ₅₀	Mosquitofish	151 mg/l	96 hours
	EC ₅₀	<i>Daphnia magna</i> (water flea)	126 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

U.S. DOT 49 CFR 172.101

This product is not regulated as packaged.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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.

SARA 311/312 Hazard Categories:

Fire Hazard:	No
Reactivity Hazard:	No
Pressure Hazard:	No
Acute Health hazard:	Yes
Chronic Health Hazard:	No

NATIONAL INVENTORY STATUS:

- **U.S. INVENTORY STATUS:** Toxic Substance Control Act (TSCA): All components are listed or exempt.
- **TSCA 12(b):** This product is not subject to export notification.
- **Canadian Chemical Inventory:** All components of this product are listed on either the DSL or the NDSL.

STATE REGULATIONS:

- **California Proposition 65:** This product is not listed, but it may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. **WARNING:** This product (when used in aqueous formulations with a chemical oxidizer such as ozone) may react to form calcium bromate, a chemical known to the State of California to cause cancer.

SECTION 16: OTHER INFORMATION

SDS Preparation Date:	April 28, 2015
SDS Revision Date:	April 28, 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 Transport Information (See Section 14)
- 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/NDL = 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

MIAMI PRODUCTS & CHEMICAL CO.

SAFETY DATA SHEET

SDS ID: SX5

Revision Date: April 28, 2015

Revision No.: 1

EPCRA = Emergency Planning & Community Right to Know Act (1986)
EU = European Union
GHS = Global Harmonization System
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