



# Material Safety Data Sheet

<b>NFPA</b>  	<b>HMIS</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; font-weight: bold;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; font-weight: bold;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0	<b>Personal Protective Equipment</b>    See Section 15.
Health Hazard	1							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
<b>Common Name/ Trade Name</b>	<b>Sodium hexametaphosphate</b>	<b>Catalog Number(s).</b> S1336, S2603, SO169
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>CAS#</b> 68915-31-1 or 10124-56-8
<b>Commercial Name(s)</b>	Calgon, HMP, Medi-Calgon, Polyphos; SHMP	<b>RTECS</b> TR4950250 [CAS no. 68915-31-1]; OY3675000 [CAS no. 10124-56-8]
<b>Synonym</b>	Sodium Polyphosphates; Glassy; Sodium Polymetaphosphate; Sodium phosphate glass; Polyphosphoric Acids, sodium salts; Hexametaphosphate, sodium salt	<b>TSCA</b> TSCA 8(b) inventory: Sodium hexametaphosphate
<b>Chemical Name</b>	Metaphosphoric Acid, hexasodium salt	<b>CI#</b> Not available.
<b>Chemical Family</b>	Not available.	<b><u>IN CASE OF EMERGENCY</u></b> <b><u>CHEMTREC (24hr) 800-424-9300</u></b>  CALL (310) 516-8000
<b>Chemical Formula</b>	(NaPO <sub>3</sub> ) <sub>n</sub> or (NaPO <sub>3</sub> ) <sub>6</sub> or O18-P6.6Na	
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
1) Sodium hexametaphosphate	10124-56-8 or 68915-31-1				100
<b>Toxicological Data on Ingredients</b>	<b>Sodium hexametaphosphate:</b> ORAL (LD50): Acute: 6200 mg/kg [Rat]. 4320 mg/kg [Mouse]. 3053 mg/kg [Rat].				

Section 3. Hazards Identification	
<b>Potential Acute Health Effects</b>	Slightly hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant), of ingestion, of inhalation.
<b>Potential Chronic Health Effects</b>	<b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

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**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
<b>Skin Contact</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
<b>Serious Skin Contact</b>	Not available.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-Ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	When heated to decomposition it emits highly toxic fumes of phosphoxides and Na <sub>2</sub> O. Behavior in a fire: It may melt with loss of steam.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7. Handling and Storage**

<b>Precautions</b>	Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area.

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	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.
<b>Personal Protection</b>	Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Exposure Limits</b>	Not available.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Solid. (Crystals solid.)	<b>Odor</b>	Odorless.
<b>Molecular Weight</b>	(101.96)*6 or 611.52 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	6 - 7.7	<b>Color</b>	White.
<b>Boiling Point</b>	1500°C (2732°F)		
<b>Melting Point</b>	550°C (1022°F) - 628 C.		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	Specific gravity: 1.79 (Water = 1) Density: 1.25		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Soluble in cold water, hot water. Soluble in water, but it dissolves slowly. Depolymerizes in aqueous solutions to form sodium trimetaphosphate and sodium orthophosphates. Insoluble in organic solvents.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Incompatible materials
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents.
<b>Corrosivity</b>	Slightly corrosive in presence of steel.
<b>Special Remarks on Reactivity</b>	Hygroscopic; keep container tightly closed.
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 3053 mg/kg [Rat].
<b>Chronic Effects on Humans</b>	Not available.
<b>Other Toxic Effects on Humans</b>	Slightly hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	Not available.
<b>Special Remarks on other Toxic Effects on Humans</b>	<p>Potential Health Effects:</p> <p>Skin: May cause skin irritation.</p> <p>Eyes: Causes eye irritation.</p> <p>Inhalation: May cause respiratory tract irritation. Symptoms may include coughing and shortness of breath.</p> <p>Ingestion: Phosphates are slowly and incompletely absorbed when ingested, and seldom result in systemic effects. However, such effects have occurred. May cause gastrointestinal tract irritation with nausea, vomiting, and diarrhea. May affect behavior/central nervous system/peripheral nervous system (somnia, convulsions, lethargy, flaccid paralysis), urinary system (kidneys- renal failure, acute tubular necrosis). It may also cause heart disturbances (fall in blood pressure, slow pulse) and blood chemistry effects (reduction of serum level of calcium). The toxicity of phosphates is because of their ability to sequester calcium. Systemic metabolic acidosis may result as this material is believed to be hydrolyzed to ortho phosphates when ingested (before absorption). Tetany may also occur as a result of reduction in serum level of ionic calcium.</p>

**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	The product itself and its products of degradation are not toxic.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

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**Section 13. Disposal Considerations**

**Waste Disposal** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

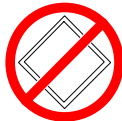
**Section 14. Transport Information**

**DOT Classification** Not a DOT controlled material (United States).

**Identification** Not applicable.

**Special Provisions for Transport** Not applicable.

**DOT (Pictograms)**



**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations** Pennsylvania RTK: Sodium hexametaphosphate (CAS no. 10124-56-8)  
 Massachusetts RTK: Sodium hexametaphosphate (CAS no. 10124-56-8)  
 New Jersey: Sodium hexametaphosphate (CAS no. 10124-56-8)  
 TSCA 8(b) inventory: Sodium hexametaphosphate

**California Proposition 65 Warnings** California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

**Other Regulations** EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications** **WHMIS (Canada)** Not controlled under WHMIS (Canada).

**DSCL (EEC)** R36- Irritating to eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**HMIS (U.S.A.)**

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	E

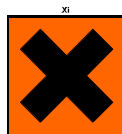
**National Fire Protection Association (U.S.A.)**

Health Flammability  
 Reactivity  
 Specific hazard

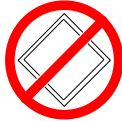
**WHMIS (Canada) (Pictograms)**



**DSCL (Europe) (Pictograms)**



**TDG (Canada)**  
(Pictograms)



**ADR (Europe)**  
(Pictograms)



**Protective Equipment**



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent.



Safety glasses.

**Section 16. Other Information**

**MSDS Code** S4070

**References** -Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987.

**Other Special Considerations** Major Uses: In photographic developing process; dairy substitute in milk-based pudding; retarder in alginate impression materials; drilling mud thinner in petroleum drilling fluids; softening water without precipitate formation

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Verified by Sonia Owen.

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CALL (310) 516-8000

**Notice to Reader**

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*