





GARDENA, CA
NEW BRUNSWICK, NJ

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table><tr><td>Health Hazard</td><td>3</td></tr><tr><td>Fire Hazard</td><td>1</td></tr><tr><td>Reactivity</td><td>1</td></tr></table>	Health Hazard	3	Fire Hazard	1	Reactivity	1	 See Section 15.
Health Hazard	3							
Fire Hazard	1							
Reactivity	1							

Section 1. Chemical Product and Company Identification

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Common Name/ Trade Name	Phenylmercuric nitrate	Catalog Number(s).	PH155, PH156
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	CAS#	55-68-5
Commercial Name(s)	Mersolite 7, Phermernite, Phenalco, Phenitol	RTECS	OW8400000
Synonym	Mercuriphenyl nitrate; Merphenyl nitrate; Phenylmercury nitrate; nitric acid, phenylmercury salt; Phenmerzyl nitrate	TSCA	TSCA 8(b) inventory: Phenylmercuric nitrate
Chemical Name	Mercury, Nitratophenyl-	CI#	Not available.
Chemical Family	Not available.	IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300 CALL (310) 516-8000	
Chemical Formula	C ₆ H ₅ HgNO ₃		
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		

Section 2. Composition and Information on Ingredients

		Exposure Limits			
Name	CAS #	TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	% by Weight
1) Phenylmercuric nitrate	55-68-5	0.1			100

Toxicological Data on Ingredients	Phenylmercuric nitrate LD50: Not available. LC50: Not available.
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Section 3. Hazards Identification

Potential Acute Health Effects	Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (permeator). Corrosive to eyes and skin. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
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Potential Chronic Health Effects

Slightly hazardous in case of skin contact (sensitizer).

CARCINOGENIC EFFECTS: Not available.**MUTAGENIC EFFECTS:** Not available.**TERATOGENIC EFFECTS:** Not available.**DEVELOPMENTAL TOXICITY:** Not available.

The substance may be toxic to kidneys, liver, skin, eyes, central nervous system (CNS).

Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4. First Aid Measures**Eye Contact**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious InhalationEvacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.**Ingestion**

If swallowed, 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 immediately.

Serious Ingestion

Not available.

Section 5. Fire and Explosion Data**Flammability of the Product**

May be combustible at high temperature.

Auto-Ignition Temperature

Not available.

Flash Points

Not available.

Flammable Limits

Not available.

Products of CombustionThese products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...). Some metallic oxides.**Fire Hazards in Presence of Various Substances**

Slightly flammable to flammable in presence of heat.

Non-flammable in presence of open flames and sparks, of shocks.

Explosion Hazards in Presence of Various Substances

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.

Slightly explosive in presence of heat.

Fire Fighting Media and Instructions

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards

When heated to decomposition it emits toxic fumes (e.g. Mercury vapor). Non-combustible. When heated, the material itself does not burn or burns with difficulty.

Special Remarks on Explosion Hazards

Containers may explode when heated.

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill	Corrosive solid. Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7. Handling and Storage

Precautions	Keep locked up.. Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as reducing agents.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

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.
Personal Protection	Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor and 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.
Exposure Limits	TWA: 0.1 (mg(Hg)/m ³) from ACGIH (TLV) [United States] SKIN TWA: 0.01 (mg(Hg)/m ³) from OSHA (PEL) [United States] Inhalation TWA: 0.1 (mg(Hg)/m ³) from NIOSH [United States] SKIN TWA: 0.1 (mg(Hg)/m ³) from ACGIH (TLV) [United States] Inhalation Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Crystals solid.)	Odor	Not available.
Molecular Weight	339.71 g/mole	Taste	Not available.
pH (1% soln/water)	Not applicable.	Color	Not available.
Boiling Point	Not available.		
Melting Point	176°C (348.8°F) - 186 C		
Critical Temperature	Not available.		
Specific Gravity	Not available.		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Insoluble in cold water. Slightly soluble in alcohol, and glycerin. More soluble in the presence of either nitric acid or alkali hydroxides.		

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Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Reactive with reducing agents.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	May cause damage to the following organs: kidneys, liver, skin, eyes, central nervous system (CNS).
Other Toxic Effects on Humans	Very hazardous in case of skin contact (irritant), of ingestion, . Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive), of inhalation (lung corrosive).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	This product is a Mercury compound. Mercury may cause adverse reproductive effects and birth defects (teratogenic). Mercury may cause cancer. Mercury may affect genetic material (mutagenic)
Special Remarks on other Toxic Effects on Humans	<p>Acute Potential Health Effects.</p> <p>Skin: Causes skin irritation with possible burns. It can be absorbed through the skin.</p> <p>Eyes: Causes eye irritation. Exposure to vapor may cause conjunctivitis, ulceration of the cornea, discoloration of the front surface of the lens, and possible burns.</p> <p>Inhalation: Inhalation of high concentrations of vapor or mist can cause respiratory tract irritation and possible chemical burns to the respiratory tract, corrosive bronchitis, interstitial pneumonia, severe pulmonary irritation, lung lesions, and death from respiratory insufficiency. Mercury vapor or mist can be absorbed by the respiratory tract. Acute mercury intoxication is rare, but can occur after inhalation of large amounts. Vapor inhalation is the most likely route of exposure. It may cause flu-like "fume metal fever" with chills, malaise, respiratory symptoms (chest tightness, difficulty breathing, coughing), fever, chills, gastrointestinal symptoms (dry mouth, nausea, vomiting, diarrhea, abdominal pain, hypermotility, stomatitis, salivation, metallic taste), and gingivitis. It may affect behavior/central nervous system/peripheral nervous system (depression, anxiety, decreased strength, muscle aches/weakness, lethargy, fatigue, headache, insomnia, dizziness, clumsiness or muscle incoordination, short-term memory loss, slurred speech, tremor, irritability, emotional instability, apathy, hallucinations, mania, xenophobia, sensitivity, impaired concentration, convulsions, stupor, coma), liver, metabolism(anorexia), cardiovascular system (hypertension, tachycardia), urinary system (kidney damage, renal impairment), and blood(increased white blood cell count, thrombocytopenia, anemia). Acute Mercury poisoning can resemble Pheochromocytoma.</p> <p>Ingestion: May cause severe gastrointestinal tract irritation with abdominal pain, thirst, salivation, metallic taste, nausea, vomiting, poor appetite, and diarrhea. May affect behavior/central nervous system, peripheral nervous system with symptoms similar to inhalation. Absorbed Mercury may affect liver, and kidneys (tissue damage)</p> <p>Chronic Potential Health Effects:</p> <p>Skin: Prolonged or repeated skin contact may cause dermatitis, and it can be absorbed through the skin and affect behavior (symptoms similar to inhalation and ingestion), and hearing.</p> <p>Inhalation: Effects may be delayed. It may cause permanent central nervous system damage and peripheral neuropathy (symptoms similar to acute exposure), liver and kidney damage, and may affect the brain.</p> <p>Ingestion: Prolonged or repeated ingestion may cause accumulation of mercury in body tissues and may cause inflammation of the mouth and gums, salivation and loosening of teeth.</p> <p>Eyes: Prolonged or repeated eye exposure to mercury vapors may result in Mercurialentis, a brownish discoloration of the lens, band keratopathy, corneal opacity and impaired vision, photophobia, color vision disturbance.</p>

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Section 12. Ecological Information

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

Section 13. Disposal Considerations

Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
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Section 14. Transport Information

DOT Classification	CLASS 6.1: Poisonous material.
Identification	: Phenylmercuric nitrate UNNA: 1895 PG: II
Special Provisions for Transport	Marine Pollutant
DOT (Pictograms)	

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations	<p>California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Phenylmercuric nitrate</p> <p>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: Phenylmercuric nitrate</p> <p>Pennsylvania RTK: Phenylmercuric nitrate</p> <p>Massachusetts RTK: Phenylmercuric nitrate</p> <p>New Jersey: Phenylmercuric nitrate</p> <p>TSCA 8(b) inventory: Phenylmercuric nitrate</p> <p>SARA 313 toxic chemical notification and release reporting: Phenylmercuric nitrate</p> <p>CERCLA: Hazardous substances.: Phenylmercuric nitrate</p>		
California Proposition 65 Warnings	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: Phenylmercuric nitrate		
Other Regulations	<p>OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).</p> <p>EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.</p>		
Other Classifications	WHMIS (Canada)	<p>CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).</p> <p>CLASS D-2B: Material causing other toxic effects (TOXIC).</p>	
	DSCL (EEC)	<p>R24/25- Toxic in contact with skin and if swallowed.</p> <p>R34- Causes burns.</p> <p>R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p>	<p>S23- Do not breathe gas/fumes/vapour/spray [***]</p> <p>S24/25- Avoid contact with skin and eyes.</p> <p>S37- Wear suitable gloves.</p> <p>S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</p> <p>S60- This material and its container must be disposed of as hazardous waste.</p> <p>S61- Avoid release to the environment. Refer</p>

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to special instructions/Safety data sheets.

HMIS (U.S.A.)

Health Hazard	3
Fire Hazard	1
Reactivity	1
Personal Protection	j

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.



Synthetic apron.



Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

Section 16. Other Information**MSDS Code** P3620**References** Not available.**Other Special Considerations** Not available.**Validated by Sonia Owen on 12/14/2012.****Verified by Sonia Owen.****Printed 5/7/2013.****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.