

SLI Technologies, Inc

Santa Rosa Industrial Park

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Milton, FL 32583
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Version 1.1

Slitech-amines.com
P 850 626 6290
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SAFETY DATA SHEET

1. Product and Company Identification

1.1. Product Identifiers

Product name: Spermidine Phosphate Salt Hexahydrate, 98%
Product number: 1212079
Brand: SLI Technologies, Inc.
CAS #: 23273-82-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses include laboratory chemicals, synthesis of substances, scientific research and development

1.3. Details of the supplier of the safety data sheet

Company: SLI Technologies, Inc
8119 Opportunity Dr
Milton, FL 32583
USA

Telephone: (850) 626-6290

1.4. Emergency telephone number:

Emergency Phone: (850) 336-0995

2. Hazards Identification

2.1. Classification of the substance or mixture

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

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Specific target organ toxicity – single exposure (Category 3), respiratory system, H335

2.2. GHS Label elements, including precautionary statements



Pictogram:

Signal Word: Warning

Hazard Statements:

H315 Causes skin irritation (skin irrit.: 2)

H319 Causes serious eye irritation (eye irrit.: 2A)

H302 Harmful if swallowed (Acute tox. 4)

H335 May cause respiratory irritation

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash skin thoroughly after handling

P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/eye protection/face protection
 P302 + P352 If on skin: Wash with plenty of soap and 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 to rinse.
 P312 Call a POISON CENTER or doctor/physician if you feel unwell
 P321 Specific treatment (see on this label)
 P332 + P313 If skin irritation occurs: get medical advice/attention
 P337 + P313 If eye irritation persists: get medical advice/attention
 P362 Take off contaminated clothing and wash before reuse
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed
 P405 Store locked up
 P501 Dispose of contents/container to an approved waste disposal plant

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

None

3. Composition/Information on Ingredients

Chemical Name:	Spermidine Phosphate Salt Hexahydrate
Common name/synonyms:	Dispermidine triphosphate hexahydrate N1-(3-Aminopropyl)butane-1,4-diamine phosphate Spermidine phosphate salt
CAS #:	23273-82-7
MF:	$C_7H_{19}N_3 \cdot 1.5H_3PO_4 \cdot 3H_2O$
MW:	346.28
EC No:	256-447-9

4. First Aid Measures

4.1. Description of first aid measures

General

Consult a physician. Show this safety data sheet to the attending doctor. Move out of dangerous area.

If inhaled

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

In case of skin contact

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

In case of eye contact

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

If swallowed

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. Do not induce vomiting.

5. Fire Fighting Measures

5.1. Flash Point

No data available.

5.2. Special hazards arising from substance

Carbon oxides, nitrogen oxides (NO_x), hydrogen chloride gas.

5.3. Extinguishing Media

Water spray, alcohol resistant foam, carbon dioxide, or dry chemical powder.

5.4. Special Firefighting Procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

5.5. Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions.

6. Accidental Release Measures:

6.1. Personal precautions, protective equipment, and emergency procedures

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Ventilate area and wash spill site after material pick up is complete. Evacuate area.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

See section 8 for personal protection.

See section 13 for disposal.

7. Handling and Storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust can form. See 2.2 for precautions.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Hygroscopic, store under inert gas. Keep in a dry place.

Recommended storage temperature: -20°C.

Storage class: 8B: Non-combustible, corrosive hazardous material

7.3. Specific end uses

None other than those mentioned in section 1.2.

8. Exposure Controls/Personal Protection

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the workday. Avoid prolonged or repeated exposure.

Personal protective equipment**Eye/face protection**

Use compatible chemical-resistant gloves, face shields, and chemical safety goggles certified by NIOSH (US) or EU 166(EU).

Skin protection

Handle with gloves. Use proper glove removal technique. Dispose of contaminated gloves. Wash and dry hands.

Body protection

Select according to concentration and amount of substance. Wash contaminated clothing before reuse. Dispose of contaminated shoes.

Respiratory protection

Use appropriate respirators as approved under NIOSH (US) or EU 166(EU).

Control of environmental exposure

Do not let product enter drains.

9. Physical and Chemical Properties

Appearance:	Form: powder Color: white
Odor:	Characteristic
Odor Threshold:	No data available
pH	6.5-8.5 (saturated solution) at 25°C
Melting Point:	200-220°C
Boiling Point:	No data available
Flash Point:	No data available
Specific Gravity:	No data available
Upper/lower flammability or explosive limits:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Partition coefficient n-octanol/water:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available

10. Stability and Reactivity**10.1. Reactivity**

No data available.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatibilities

Strong oxidizing agents.

10.6. Hazardous Combustion or Decomposition Products

Other decomposition products: no data available. See section 5 in the event of fire.

10.7. Hazardous Polymerization

No data available.

11. Toxicological Information

11.1. Acute Toxicity

Inhalation: No data available.

Dermal: No data available.

LD 50 Intraperitoneal – Mouse – 468 mg/kg: Behavioral: excitement; Cardiac: pulse rate increased without fall in BP; Metabolic: body temperature decreases.

LD 50 Intraperitoneal – Mouse – 92 mg/kg: Behavioral: excitement; Cardiac: pulse rate increased without fall in BP; Metabolic: body temperature decreases.

11.2. Exposure/Symptoms

No data available.

11.3. Skin corrosion/irritation

No data available.

11.4. Respiratory/Ingestion

No data available.

11.5. Eye damage/irritation

No data available.

11.6. Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen.

11.7. Additional Information

No data available.

12. Ecological Information

12.1. Toxicity

No data available.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Assessments not available/not required or conducted.

12.6. Other adverse effects

No data available.

13. Disposal Consideration

13.1. Waste treatment methods

Product

Contact a licensed professional waste disposal service to dispose of this material.

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. Transport Information

DOT (US)

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

15. Regulatory Information

15.1. European Information

No data available.

15.2. Reviews, Standards, and Regulations

SARA 302: Not subject to reporting requirements.

SARA 313: Does not exceed threshold.

SARA 311/313 Hazards: Acute health hazard.

Massachusetts Right to Know Components: No components are subject to the Act.

Pennsylvania Right to Know Components: Spermidine Phosphate Hexahydrate; CAS-No. 23273-82-7

New Jersey Right to Know Components: Spermidine Phosphate Hexahydrate; CAS-No. 23273-82-7

California Prop 65 Components: Does not contain chemicals known to the state to cause cancer, birth defects, or any other reproductive harm.

16. Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This document does not guarantee the properties of the product. SLI Technologies, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.