

1801, Block B, Wanli Plaza, Friendship Avenue, WuChang District, WuHan, China

Material Safety Data Sheet Spermidine Trihydrochloride

Section 1: Chemical Product and Company Identification

ProductName: Spermidine Trihydrochloride Contact information

Catalog Codes: Not available

Add:1801,Block B, Wanli Plaza, Friendship Avenue, WuChang District, WuHan,China

RTECS: Not available Tel:86-27-50247191 **TSCA:** Not available Fax:86-27-50247191

CI#: Not available CAS::334-50-9 Email:sherley@whmkbio.com

Section 2: Composition and Information on Ingredients

Composition:

Name	Content
Spermidine Trihydrochloride	≥99%

Toxicological Data on Ingredients: Not applicable

Section 3:Hazards Identification

Potential Acute Health Effects: Hazardous in case of eye contact (irritant), of inhalation.

Slightly hazardous in cast of skin contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects: CARCINOGENIC EFFECTS: Not available MUTAGENIC EFFECTS: Not available TERATOGENIC EFFECTS: Not available DEVELOPMENTAL TOXICITY: Not available

Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4: First Aid Measures



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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.

Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available

Inhalation:

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

Serious Inhalation: Not available

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

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 Combustion: Not available

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat.

Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available

Slightly explosive in presence of open flames and sparks.

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: As with most organic solids, fire is possible at elevated

temperatures

Special Remarks on Explosion Hazards:

Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

Section 6: Accidental Release Measures



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Small Spill:

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.

Large Spill:

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

Precautions:

away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, brate the residue under a fume hood. Ground all equipment containing material. Do not breathe Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, suitable respiratory equipment. If you feel unwell, seek medical attention and show the label possible.

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. Lab coat, 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. 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 the product.

Exposure Limits: Not available

Section 9: Physical and Chemical Properties

Physical state and appearance: powder. (White powder)

Odor:Characteristic **Taste:** Characteristic **Color:** white powder

pH(1% soln/water):Not available

Boiling Point: Not available **Melting Point:** Not available

Critical Temperature: Not available Specific Gravity: Not available Vapor Pressure: Not available Vapor Density: Not available Volatility: Not available



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Odor Threshold: Not available

Water/Oil Dist. Coeff.: Not available Ionicity (in Water): Not available

Dispersion Properties: See solubility in water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available

Conditions of Instability: Excessive heat, dust generation **Incompatibility with various substances:** Not available

Corrosivity: Not available

Special Remarks on Reactivity: Not available Special Remarks on Corrosivity: Not available

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion

Toxicity to Animals: LD50: Not available LC50: Not available

Chronic Effects on Humans: Not available

Other Toxic Effects on Humans: Hazardous in case of inhalation.

Slightly hazardous in case of skin contact (irritant), of ingestion.

Special Remarks on Toxicity to Animals: Not available

Special Remark on Chronic Effects on Humans: Not available

Special Remark on other Toxic Effects on Humans:

Potential Health Effects:

Skin: Unlikely to cause skin irritation. Prolonged or repeated skin contact may cause dryness and cracking of the skin.

Eyes: Can cause eye irritation.

Inhalation: This material my produce dust. It can respiratory tract (nose, throat, airways) irritation with soreness, dry or scratchy feeling and cough. Breathing small amounts of this material during usual industrial handling is not likely to be harmful. Breathing large amounts may be harmful.

Ingestion: May cause sore throat, and mouth

The toxicological properties of this substance have not bee fully investigated

Section 12: Ecological Information



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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: Not available

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.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States)

Identification: Not applicable

Special Provisions for Transport: Not applicable

Section 15: Other Regulatory Information

Federal and State Regulation: No products were found.

Other Regulations: Not available

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada)

DSCL (EEC):

R36-Irritating to eyes.

S2-keep out of the reach of children. S46-If swallowed, seek medical advice

Immediately and show this container or label.

HMIS (U.S.A.)
Health Hazard: 1
Fire Hazard: 1
Reactivity: 0

Personal Protection: E

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

Health: 1

Flammability:1
Reactivity: 0
Specific hazard:
Protective Equipment:

Gloves

Lab coat

Dust respirator. Be sure to use an Approved/certified respirator of

Equivalent



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Section 16: Other Information

References: Not available **Other Special Considerations:**

This product is not sold as a food. Determination of its suitability for a particular use should be made by qualified persons familiar with its properties and composition.

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