





# Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table><tr><td>Health Hazard</td><td>1</td></tr><tr><td>Fire Hazard</td><td>1</td></tr><tr><td>Reactivity</td><td>0</td></tr></table>	Health Hazard	1	Fire Hazard	1	Reactivity	0	<div></div> <div>See Section 15.</div>
Health Hazard	1							
Fire Hazard	1							
Reactivity	0							

## Section 1. Chemical Product and Company Identification

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<b>Common Name/ Trade Name</b>	<b>D-Pantethine</b>	<b>Catalog Number(s).</b>	P1024
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>CAS#</b>	16816-67-4
<b>Commercial Name(s)</b>	Not available.	<b>RTECS</b>	ES4392700
<b>Synonym</b>	D-Bis-(N-pantothenyl-beta-aminoethyl)disulfide Butanamide, N,N'-[dithiobis[2,1-ethanediyylimino(3-oxo-3,1-propanediyl)]]bis[2,4-d Butanamide, N,N'-[dithiobis[2,1-ethanediyylimino(3-oxo-3,1-propanediyl)]]bis[2,4-d [R-(R*,R*)]- Butyramide, N,N'-[dithiobis(ethyleneiminocarbonyl)ethylene]]bis[2,4-dihydroxy-3,3 D-(+)- (8Cl) Bis(N-pantothenylamidoethyl) disulfide Bis(pantothenamidoethyl) disulfide D-Bis-pantothenyl-.beta.-aminoethyl disulfide D-Pantethine Pantethine Pantetina Panthecin Pantomin Pantosin D-Pantethine hydrate	<b>TSCA</b>	TSCA 8(b) inventory: No products were found.
<b>Chemical Name</b>	D-Pantethine	<b>CI#</b>	Not available.
<b>Chemical Family</b>	Not available.	<b>IN CASE OF EMERGENCY</b> <a href="tel:8004249300">CHEMTREC (24hr) 800-424-9300</a>  CALL (310) 516-8000	
<b>Chemical Formula</b>	C22-H42-N4-O8-S2		
<b>Supplier</b>	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 <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	% by Weight
1) {D}-Pantethine	16816-67-4				100
<b>Toxicological Data on Ingredients</b>					
Not applicable.					

**Section 3. Hazards Identification**

**Potential Acute Health Effects** Slightly hazardous in case of skin contact (irritant), of eye 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**

**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. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**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. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**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** These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...), sulfur oxides (SO<sub>2</sub>, SO<sub>3</sub>...).

**Fire Hazards in Presence of Various Substances** Slightly flammable to flammable in presence of open flames and sparks, of heat.

**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.

**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** Not available.

**Special Remarks on Explosion Hazards** Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate 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>	Absorb with an inert material and put the spilled material in an appropriate waste disposal. 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>	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 gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, reducing agents, alkalis.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 8°C (46.4°F).

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

<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Personal Protection</b>	Safety glasses or Splash goggles. Synthetic apron. Gloves (impervious). Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Boots. Gloves. 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>	Liquid. (Viscous liquid.)	<b>Odor</b>	Not available.
<b>Molecular Weight</b>	554.8 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not available.	<b>Color</b>	Colorless to light yellow.
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	Not available.		
<b>Vapor Pressure</b>	Not available.		
<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>	Easily soluble in cold water, hot water.		

**Section 10. Stability and Reactivity Data**

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, incompatible materials
Incompatibility with various substances	Reactive with oxidizing agents, reducing agents, alkalis.
Corrosivity	Not available.
Special Remarks on Reactivity	Incompatible with alkali metals
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

**Section 11. Toxicological Information**

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 0.1 mg/kg [Mouse].
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data. The Registry of Toxic Effects of Chemical Substances (RTECS) shows reproductive effects data (Effects on Embryo or Fetus: fetotoxicity, Specific Developmental Abnormalities: Musculoskeletal system, Effects on Newborn: Weaning or lactation index, growth statics) on animals when exposed by intramuscular injection only, no data from oral route. No data available for humans.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: May cause eye and skin irritation Inhalation of mist or vapor may cause respiratory tract irritation. Ingestion may cause hypermotility and diarrhea. Expected to be a low hazard.

**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 product itself and its products of degradation are not toxic.
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**

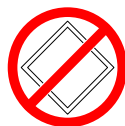
Not a DOT controlled material (United States).

**Identification**

Not applicable.

**Special Provisions for Transport**

Not applicable.

**DOT (Pictograms)****Section 15. Other Regulatory Information and Pictograms****Federal and State Regulations**

No products were found.

**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 (EINECS No. 240-842-8).  
Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non-Domestic Substances List (NDSL).  
China: Not listed on National Inventory.  
Japan: Listed on National Inventory (ENCS).  
Korea: Not listed on National Inventory (KECI).  
Philippines: Not listed on National Inventory (PICCS).  
Australia: Listed on AICS.

**Other Classifications****WHMIS (Canada)**

Not controlled under WHMIS (Canada).

**DSCL (EEC)**

This product is not classified according to the EU regulations.

Not applicable.

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

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	C

**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.

Not applicable.  
Safety glasses.**Section 16. Other Information****MSDS Code** P3073**References** Not available.**Other Special Considerations** Not available.

Validated by Sonia Owen on 6/27/2013.

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.