



Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
210	Health Hazard Fire Hazard 1	
	Reactivity	See Section 15.

Section 1. Chemical Product and Company Identification			Page Number: 1
Common Name/ Trade Name	N,N-Diethyl-p-phenylenediamine Sulfate	Catalog Number(s).	D3427
		CAS#	6283-63-2
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC.	RTECS	SS9625000
	14422 S. SAN PEDRO STREET GARDENA, CA 90248	TSCA	TSCA 8(b) inventory: No products were found.
Commercial Name(s)	Not available.	CI#	Not available.
Synonym	1,4 - B e n z e n e d i a m i n e , $$ N , N - d i e t h y l - , $$ s u I f a t e N,N-Diethyl-1,4-phenylenediamine sulfate	; <u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u>	
Chemical Name	p-Phenylenediamine, N,N-diethyl-, sulfate		
Chemical Family	Not available.		16-8000
Chemical Formula	C10-H16-N2.H2SO4		
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		

			Exposure Limits		
Name	CAS#	TWA (mg/m³)	STEL (mg/m³)	CEIL (mg/m³)	% by Weight
1) {N,N-}Diethyl-p-phenylenediamine Sulfate	6283-63-2				100

on Ingredients LD50: Not available. LC50: Not available.

Section 3. Hazards Identification

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

inhalation.

CARCINOGENIC EFFECTS: Not available. **Potential Chronic Health Effects**

MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

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

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

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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. 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	These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2), sulfur oxides (SO2, SO3).		
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	Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.		
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.		

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.

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Section 7. Handling and Storage		
Precautions	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. 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.	
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 8°C (46.4°F). Refrigerate.	

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	Safety glasses. 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 this product.	
Exposure Limits	Not available.	

Section 9. Physical a	nd Chemical Properties		
Physical state and appearance	Solid.	Odor	Not available.
Molecular Weight	262.32 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	White to light brown
Boiling Point	Not available.		
Melting Point	185°C (365°F) - 189 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	See solubility in water.		
Solubility	Soluble in cold water.		

Section 10. Stability and Reactivity Data		
Stability	The product is stable.	
Instability Temperature	Not available.	
Conditions of Instability	Excess heat, dust generation, incompatible materials	
Incompatibility with various substances	Reactive with oxidizing agents, acids.	
Corrosivity	Not available.	

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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	MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.	
Other Toxic Effects on Humans	Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.	
Special Remarks on Toxicity to Animals	Not available.	
Special Remarks on Chronic Effects on Humans	May affect genetic material (mutagenic). May cause adverse reproductive effectsbased on animal test data	
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: Causes eye irritation. Inhalation: May cause respiratory tract irritation. Ingestion: Harmful if swallowed. May affect behavior/central nervous system (tremor, convulsions, rigidity, excitement, ataxia, muscle contraction or spasticity), Blood (methemoglobinemia due to a defficiency of oxygen in the blood). Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion may affect the blood (changes in white blood cell count, pigmented or nucleated red blood cells), liver (hepatitis), urinary system/kidneys (acute renal failure, acute tubular necrosis).	

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	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 No products were found. **Federal and State** Regulations California prop. 65: This product contains the following ingredients for which the State of California has found California to cause cancer which would require a warning under the statute: No products were found. 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: No products were found. **Other Regulations** EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances. Other Classifications Not controlled under WHMIS (Canada). WHMIS (Canada) DSCL (EEC) R22- Harmful if swallowed. S36- Wear suitable protective clothing. **Health Hazard** HMIS (U.S.A.) (1) **National Fire Protection** Flammability Association (U.S.A.) Fire Hazard 1 Health Reactivity Reactivity 0 Specific hazard **Personal Protection** \mathbf{E} WHMIS (Canada) (Pictograms) DSCL (Europe) (Pictograms) TDG (Canada) (Pictograms) ADR (Europe) (Pictograms) **Protective Equipment**

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N,N-Diethyl-p-phenylenediamine Sulfate



Gloves.



Lab coat.



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

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Section 16. Other Information		
MSDS Code	D0286	
References	Not available.	
Other Special Considerations	Not available.	
Validated by Sonia Owen on 8/11/2006.		Verified by Sonia Owen. Printed 9/12/2006.

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.