

Issuing Date 11/15/2010

Revision date 8/7/2012

Revision Number 1

**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name</b>	DPD 1R Test Tablet
<b>Product Code(s)</b>	6999 (Tabletas de Cloro DPD # 1R)
<b>Synonyms</b>	none / ninguno / aucun
<b>Recommended Use</b>	Laboratory chemicals.
<b>Company</b>	LaMotte Company, Inc. 802 Washington Avenue P.O. Box 329 Chestertown, MD 21620 USA
<b>Emergency telephone number</b>	24 Hour Emergency Number (CHEM-TEL): USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

**2. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

Harmful if swallowed  
May cause skin, eye, and respiratory tract irritation  
May produce an allergic reaction

**Appearance** White to off-white**Physical state** solid, tablet**Odor** odorless

**OSHA Regulatory Status** Safety information is given for exposure to the reagent as sold and considers exposure to the chemical if user has direct eye and skin contact.

**Potential health effects**

**Principle Routes of Exposure** Skin Contact, Inhalation.

**Acute toxicity****Eyes**

May cause irritation.

**Skin**

May cause irritation.

**Inhalation**

May cause irritation of respiratory tract.

**Ingestion**

May be harmful if swallowed.

**Chronic effects**

May produce an allergic reaction.

**Main Symptoms**

Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

**Aggravated Medical Conditions** None known.

**Interactions with Other Chemicals** None known.

**Environmental hazard** No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	1
Excipient	-	1-10
Excipient	-	1-10
Boric acid	10043-35-3	9
Carboxylic acid	-	5-15
Carbonate salt	-	10-20
Excipient	-	10-20
Phosphate salt	-	20-30

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5003p, and may be disclosed only in a medical emergency.

### 4. FIRST AID MEASURES

<b>General advice</b>	Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Consult a physician.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Call a physician immediately.
<b>Ingestion</b>	Induce vomiting, but only if victim is fully conscious. Drink plenty of water. Clean mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Notes to Physician</b>	May cause sensitization of susceptible persons. Treat symptomatically.
<b>Protection of First-aiders</b>	Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Not a fire hazard.
<b>Flash point</b>	Not Applicable
<b>Suitable extinguishing media</b>	Water spray, dry chemical, carbon dioxide (CO <sub>2</sub> ), or foam.

<b>NFPA</b>	Health hazard 1	flammability 0	Stability 0	<b>Physical and Chemical Hazards</b> N/A
<b>HMIS</b>	Health hazard 1	flammability 0	Stability 0	

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Refer to Section 8.
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**Methods for containment** Prevent dust cloud. Sweep up in a manner that does not disperse dust and shovel into suitable containers for disposal. Dispose according to local regulations, if permitted dissolve in water and rinse to drain.

**Methods for cleaning up** Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

**Handling** Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not ingest. Do not eat, drink, or smoke when using this product.

**Storage** Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep out of the reach of children. Keep away from direct sunlight.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None known	None known	None known
Excipient	None known	None known	None known
Excipient	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
Boric acid 10043-35-3	= 6 mg/m <sup>3</sup> STEL TWA: 2 mg/m <sup>3</sup>	None known	None known
Carboxylic acid	None known	None known	None known
Carbonate salt	None known	None known	None known
Excipient	None known	None known	None known
Phosphate salt	None known	None known	None known

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

**Eye/face Protection**

Safety glasses with side-shields. Avoid contact with eyes.

**Skin and body protection**

Wear latex or nitrile gloves.

**Respiratory protection**

None required under normal usage.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	White to off-white	<b>Odor</b>	odorless
<b>Physical state</b>	solid, tablet	<b>pH</b>	6 (1 tablet in 10mL of water)
<b>Flash point</b>	Not Applicable	<b>Autoignition temperature</b>	6.0
<b>Boiling Point/Range</b>	Not Applicable	<b>Freezing Point</b>	Not Applicable
<b>Explosion Limits</b>	Not Applicable		No information available
no data available		<b>Molecular weight</b>	no data available
<b>Water solubility</b>	Soluble in water	<b>solubility</b>	Soluble

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable.
<b>Incompatible Products</b>	None known based on information supplied.
<b>Conditions to avoid</b>	Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight. Keep away from children.
<b>Hazardous Reactions</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

**LD50 Oral VALUE (mg/kg)** Oral Rat LD50: 195mg/kg for N,N-Diethyl-p-phenylenediamine sulfate

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
N,N-Diethyl-p-phenylenediamine sulfate	None known	None known	None known
Excipient	None known	None known	None known
Excipient	5 g/kg ( Rat )	2 g/kg ( Rabbit )	5800 mg/m <sup>3</sup> ( Rat ) 4 h
Boric acid	2660 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	None known
Carboxylic acid	3000 mg/kg ( Rat )	None known	None known
Carbonate salt	1440 mg/kg ( Rat )	1.87 mg/kg ( Rat )	None known
Excipient	10 g/kg ( Rat )	None known	None known
Phosphate salt	None known	4640 mg/kg ( Rabbit )	None known

### Chronic toxicity

**Chronic toxicity** May produce an allergic reaction.

Chemical name	ACGIH	IARC	NTP	OSHA
N,N-Diethyl-p-phenylenediamine sulfate	None known	None known	None known	None known
Excipient	None known	None known	None known	None known
Excipient	None known	None known	None known	None known
Boric acid	None known	None known	None known	None known
Carboxylic acid	None known	None known	None known	None known
Carbonate salt	None known	None known	None known	None known
Excipient	None known	None known	None known	None known
Phosphate salt	None known	None known	None known	None known

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine disrupting potential
N,N-Diethyl-p-phenylenediamine sulfate	None known	None known	None known
Excipient	None known	None known	None known
Excipient	None known	None known	None known
Boric acid	None known	None known	None known
Carboxylic acid	None known	None known	None known
Carbonate salt	None known	None known	None known
Excipient	None known	None known	None known
Phosphate salt	None known	None known	None known

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

No information available.

Chemical name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
N,N-Diethyl-p-phenylenediamine sulfate	None known	None known	None known	None known
Excipient	None known	None known	None known	None known
Excipient	None known	None known	None known	None known
Boric acid	None known	None known	None known	EC50 658 - 875 mg/L 48 h EC50 = 115.0 mg/L 48 h
Carboxylic acid	None known	LC50= 1516 mg/L <i>Lepomis macrochirus</i> 96 h LC50= 440 mg/L <i>Leuciscus idus</i> 96 h	EC50 = 14 mg/L 15 min	EC50 = 120 mg/L 72 h
Carbonate salt	None known	None known	None known	None known
Excipient	None known	None known	None known	None known
Phosphate salt	None known	None known	None known	None known
Chemical name	Log Pow			
N,N-Diethyl-p-phenylenediamine sulfate	None known			
Excipient	None known			
Excipient	None known			
Boric acid	= -0.757 25 °C			
Carboxylic acid	-1.72 20 °C			
Carbonate salt	None known			
Excipient	None known			
Phosphate salt	None known			

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method**

Dispose of in accordance with local regulations. Can be incinerated, when in compliance with local regulations. Should not be released into the environment.

**Contaminated packaging**

Dispose of in accordance with local regulations.

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
N,N-Diethyl-p-phenylenediamine sulfate - 6283-63-2	None known	None known	None known	None known
Excipient -	None known	None known	None known	None known
Excipient -	None known	None known	None known	None known
Boric acid - 10043-35-3	None known	None known	None known	None known
Carboxylic acid -	None known	None known	None known	None known
Carbonate salt -	None known	None known	None known	None known
Excipient -	None known	None known	None known	None known
Phosphate salt -	None known	None known	None known	None known

## 14. TRANSPORT INFORMATION

**DOT**

Not regulated

**IATA**

Not regulated

**IMDG/IMO**

Not regulated

## 15. REGULATORY INFORMATION

**International Inventories**

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2 ( 1 )	TSCA	DSL	X	3-243	X	KECL	X	X
Excipient ( 1-10 )	XU	X	EINECS/ELINCS	6-902	X	KE-25266	X	X
Excipient ( 1-10 )	XU	X	X	8-568	X	KE-05339	X	X
Boric acid 10043-35-3 ( 9 )	Present	X	X	1-63	X	KE-03499	X	X
Carboxylic acid ( 5-15 )	Present	X	X	2-1318	X	KE-20831	X	X
Carbonate salt ( 10-20 )	Present	X	X	1-153	X	KE-29083	X	X
Excipient ( 10-20 )	Present	X	X	ENCS	X	KE-17416	X	X
Phosphate salt ( 20-30 )	Present	X	X	1-452	X	KE-28622	X	X

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	1	None known
Excipient		1-10	None known
Excipient		1-10	None known
Boric acid	10043-35-3	9	None known
Carboxylic acid		5-15	None known
Carbonate salt		10-20	None known
Excipient		10-20	None known
Phosphate salt		20-30	None known

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	yes
<b>Chronic Health Hazard</b>	yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2 ( 1 )	None known	None known	None known	None known
Excipient ( 1-10 )	None known	None known	None known	None known
Excipient ( 1-10 )	None known	None known	None known	None known
Boric acid 10043-35-3 ( 9 )	None known	None known	None known	None known
Carboxylic acid ( 5-15 )	None known	None known	None known	None known

Carbonate salt ( 10-20 )	None known	None known	None known	None known
Excipient ( 10-20 )	None known	None known	None known	None known
Phosphate salt ( 20-30 )	None known	None known	None known	None known

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Chemical name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
N,N-Diethyl-p-phenylene diamine sulfate	6283-63-2	1	None known	None known	None known	None known
Excipient		1-10	None known	None known	None known	None known
Excipient		1-10	None known	None known	None known	None known
Boric acid	10043-35-3	9	None known	None known	None known	None known
Carboxylic acid		5-15	None known	None known	None known	None known
Carbonate salt		10-20	None known	None known	None known	None known
Excipient		10-20	None known	None known	None known	None known
Phosphate salt		20-30	None known	None known	None known	None known

**CERCLA**

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ
N,N-Diethyl-p-phenylenediamine sulfate	None known	None known
Excipient	None known	None known
Excipient	None known	None known
Boric acid	None known	None known
Carboxylic acid	None known	None known
Carbonate salt	None known	None known
Excipient	None known	None known
Phosphate salt	None known	None known

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical name	CAS-No	California Prop. 65
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	None known
Excipient		None known
Excipient		None known
Boric acid	10043-35-3	None known
Carboxylic acid		None known
Carbonate salt		None known
Excipient		None known
Phosphate salt		None known

**U.S. State Right-to-Know Regulations**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
N,N-Diethyl-p-phenylenediamine sulfate	None known	None known	None known	None known	None known
Excipient	None known	None known	None known	None known	None known
Excipient	X	None known	X	None known	X
Boric acid	None known	X	None known	None known	None known
Carboxylic acid	None known	None known	None known	None known	None known
Carbonate salt	None known	None known	None known	None known	None known

Excipient	None known	None known	None known	None known	None known
Phosphate salt	None known	None known	None known	None known	None known

**International Regulations**

**Mexico - Grade**

Chemical name	Carcinogen Status	Exposure Limits
N,N-Diethyl-p-phenylenediamine sulfate	None known	None known
Excipient	None known	None known
Excipient	None known	Mexico: TWA= 10 mg/m <sup>3</sup>
Boric acid	None known	None known
Carboxylic acid	None known	None known
Carbonate salt	None known	None known
Excipient	None known	None known
Phosphate salt	None known	None known

**CANADA**

LaMotte classifies as a Laboratory Supply House per section 10 and 17 of the CPR and is exempt

Component	WHMIS Hazard Class
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2 ( 1 )	Not Determined
Excipient ( 1-10 )	Not Determined
Excipient ( 1-10 )	Uncontrolled product according to WHMIS classification criteria
Boric acid 10043-35-3 ( 9 )	1 % D2A
Carboxylic acid ( 5-15 )	1 % E
Carbonate salt ( 10-20 )	1 % D2B E
Excipient ( 10-20 )	Uncontrolled product according to WHMIS classification criteria
Phosphate salt ( 20-30 )	Uncontrolled product according to WHMIS classification criteria



**16. OTHER INFORMATION**

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;"><b>0</b></td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;"><b>0</b></td> </tr> </table>	Health Hazard	<b>1</b>	Fire Hazard	<b>0</b>	Reactivity	<b>0</b>		
Health Hazard	<b>1</b>								
Fire Hazard	<b>0</b>								
Reactivity	<b>0</b>								

Prepared by  
Issuing Date  
Revision date

Regulatory Affairs Department  
11/15/2010  
07-Aug-2012



**Revision note**

MSDS was reviewed per Canada request - Canada requires MSDS to be dated within 3 years of the request.

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**