

# **Material Safety Data Sheet**

Issuing Date 12/6/2011 Revision Number 0

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name DPD #4R TABLET

Product Code(s) 6899

**Recommended Use**Test kit reagent. Industrial (not for food or food contact use). Laboratory chemicals.

Company LaMotte Company, Inc.

802 Washington Avenue

P.O. Box 329

Chestertown, MD 21620

USA

**Emergency Telephone Number** 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 Physical State Solid, Tablet Odor Odorless

**Potential Health Effects** 

Principle Routes of Exposure Skin contact, Ingestion.

**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 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 %
Excipient / tableting aid	-	<0.2
Polymer	-	<1
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	1
Chelants	-	<2
Resin / excipient	-	1-5
Carbonate salt	-	1-5
Potassium salt	-	5-10
Potassium iodide	7681-11-0	5-15
Boric acid	10043-35-3	5-15
Excipient / tableting aid	-	25-35
Phosphate salt	-	30-40

Ingredients not specifically listed by name are proprietary to the LaMotte Company, registered under the State of New Jersey Trade Secret protection law, assigned the NJTSRN#80100291-5050p, and may be disclosed only in a medical emergency.

#### 4. FIRST AID MEASURES

**General Advice** Do not get in eyes, on skin, or on clothing.

**Eye Contact**Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

**Skin Contact**Wash off immediately with soap and plenty of water for at least 15 minutes while removing

all contaminated clothing and shoes. If irritation develops or persists, consult physician.

**Inhalation** Not expected to require first aid measures. Move to fresh air.

**Ingestion** Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a

physician.

Notes to Physician May cause sensitization of susceptible persons. Treat symptomatically.

Protection of First-aiders

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

**Flammable Properties**Flash Point
Not a fire hazard.
Not applicable

Suitable Extinguishing Media Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), or foam.

**Explosion Data** 

NFPA Health Hazard 1 Flammability 0 Stability 0 Physical and Chemical Hazards N/A

HMIS Health Hazard 1 Flammability 0 Stability 0

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### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Refer to Section 8.

**Methods for Containment**Sweep up in a manner that does not dispurse 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 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
Excipient / tableting aid	None Known	None Known	None Known
Polymer	None Known	None Known	None Known
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Known	None Known	None Known
Chelants	None Known	None Known	None Known
Resin / excipient	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known
Potassium iodide 7681-11-0	TWA: 0.01 ppm	None Known	None Known
Boric acid 10043-35-3	= 6 mg/m³ STEL TWA: 2 mg/m³	None Known	None Known
Excipient / tableting aid	None Known	None Known	None Known
Phosphate salt	None Known	None Known	None Known

**Engineering Measures** Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/Face Protection Skin and Body Protection Respiratory Protection Safety glasses with side-shields. Avoid contact with eyes.

Wear latex or nitrile gloves.

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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance White Odor Odorless

Physical State Solid, Tablet pH 6 (1 tablet in 10mL of water)

Flash Point Not applicable Autoignition Temperature Not applicable

Boiling Point/Range Not applicable Freezing Point No information available

Explosion Limits Not applicable

Molecular Weight No data available Water Solubility Soluble in water

**Solubility** Soluble

## 10. STABILITY AND REACTIVITY

Stability Stable.

Incompatible Products None known based on information supplied.

Conditions to Avoid Exposure to air or moisture over prolonged periods. Extremes of temperature and direct

sunlight.

Hazardous Decomposition Products Hazardous decomposition products formed under fire conditions - . Hydrogen iodide.

lodine.

**Hazardous Reactions** Hazardous polymerization does not occur.

#### 11. TOXICOLOGICAL INFORMATION

#### **Acute Toxicity**

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

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
Excipient / tableting aid	None Known	None Known	None Known
Polymer	100 g/kg (Rat)	None Known	None Known
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known	None Known
Chelants	2 g/kg (Rat)	None Known	None Known
Resin / excipient	None Known	None Known	None Known
Carbonate salt	1440 mg/kg (Rat)	1.87 mg/kg ( Rat )	None Known
Potassium salt	2600 mg/kg (Rat)	None Known	None Known
Potassium iodide	None Known	None Known	None Known
Boric acid	2660 mg/kg (Rat)	2000 mg/kg (Rabbit)	None Known
Excipient / tableting aid	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
Excipient / tableting aid	None Known	None Known	None Known	None Known
Polymer	None Known	None Known	None Known	None Known
N,N-Diethyl-p-phenylenedia mine sulfate	None Known	None Known	None Known	None Known
Chelants	None Known	None Known	None Known	None Known

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Resin / excipient	None Known	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known	None Known
Potassium iodide	None Known	None Known	None Known	None Known
Boric acid	None Known	None Known	None Known	None Known
Excipient / tableting aid	None Known	None Known	None Known	None Known
Phosphate salt	None Known	None Known	None Known	None Known

# **Endocrine Disruptor Information**

Chemical Name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Excipient / tableting aid	None Known	None Known	None Known
Polymer	None Known	None Known	None Known
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known	None Known
Chelants	None Known	None Known	None Known
Resin / excipient	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known
Potassium iodide	None Known	None Known	None Known
Boric acid	None Known	None Known	None Known
Excipient / tableting aid	None Known	None Known	None Known
Phosphate salt	None Known	None Known	None Known

# 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Excipient / tableting aid	None Known	None Known	None Known	None Known
Polymer	None Known	None Known	None Known	None Known
N,N-Diethyl-p-phenylenedia mine sulfate	None Known	None Known	None Known	None Known
Chelants	None Known	LC50= 159 mg/L Lepomis macrochirus 96 h LC50= 320 mg/L Poecilia reticulata 96 h	EC50 = 56 mg/L 8 h	None Known
Resin / excipient	None Known	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known	None Known
Potassium salt	EC50 = 2500 mg/L 72 h	LC50= 2010 mg/L Lepomis macrochirus 96 h	None Known	EC50 = 825 mg/L 48 h
Potassium iodide	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
Excipient / tableting aid	None Known	None Known	None Known	None Known
Phosphate salt	None Known	None Known	None Known	None Known

Chemical Name	Log Pow
Excipient / tableting aid	None Known
Polymer	None Known
N,N-Diethyl-p-phenylenediamine sulfate	None Known
Chelants	None Known
Resin / excipient	None Known
Carbonate salt	None Known
Potassium salt	None Known
Potassium iodide	None Known
Boric acid	= -0.757 25 °C
Excipient / tableting aid	None Known
Phosphate salt	None Known

## 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with local regulations.

**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
Excipient / tableting aid -	None Known	None Known	None Known	None Known
Polymer -	None Known	None Known	None Known	None Known
N,N-Diethyl-p-phenylenedia mine sulfate - 6283-63-2	None Known	None Known	None Known	None Known
Chelants -	None Known	None Known	None Known	None Known
Resin / excipient -	None Known	None Known	None Known	None Known
Carbonate salt -	None Known	None Known	None Known	None Known
Potassium salt -	None Known	None Known	None Known	None Known
Potassium iodide - 7681-11-0	None Known	None Known	None Known	None Known
Boric acid - 10043-35-3	None Known	None Known	None Known	None Known
Excipient / tableting aid -	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/ELIN CS	ENCS	IECSC	KECL	PICCS	AICS
Excipient / tableting aid ( <0.2 )	TSCA	DSL	Х	ENCS	IECSC	KECL	PICCS	AICS
Polymer (<1)	XU	Х	EINECS/ELIN CS	6-1007; 6-1048	Х	KE-13324	Х	Х
N,N-Diethyl-p-phenyle nediamine sulfate 6283-63-2 ( 1 )	TSCA	DSL	X	3-243	X	KECL	Х	Х
Chelants ( <2 )	Present	Х	Х	2-1265	Х	KE-13651	Х	Х
Resin / excipient (1-5)	XU	Х	EINECS/ELIN CS	6-902	Х	KE-25266	Х	Х
Carbonate salt (1-5)	Present	Х	Х	1-153	Х	KE-29083	Х	Х
Potassium salt (5-10)	Present	Х	Х	1-228	Х	KE-29086	Х	Х
Potassium iodide 7681-11-0 ( 5-15 )	Present	Х	Х	(1)-439	Х	KECL	Х	Х
Boric acid 10043-35-3 ( 5-15 )	Present	Х	Х	1-63	Х	KE-03499	Х	Х
Excipient / tableting aid ( 25-35 )	Present	Х	X	ENCS	Х	KE-17416	Х	Х
Phosphate salt ( 30-40 )	Present	Х	Х	1-452	Х	KE-28622	Х	Х

## **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 %
Excipient / tableting aid		<0.2	None Known
Polymer		<1	None Known
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	1	None Known
Chelants		<2	None Known
Resin / excipient		1-5	None Known
Carbonate salt		1-5	None Known
Potassium salt		5-10	None Known
Potassium iodide	7681-11-0	5-15	None Known
Boric acid	10043-35-3	5-15	None Known
Excipient / tableting aid		25-35	None Known
Phosphate salt		30-40	None Known

## SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	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 122.21)

CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Excipient / tableting aid ( <0.2 )	None Known	None Known	None Known	None Known
Polymer (<1)	None Known	None Known	None Known	None Known
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2 ( 1 )	None Known	None Known	None Known	None Known
Chelants (<2)	None Known	None Known	None Known	None Known
Resin / excipient (1-5)	None Known	None Known	None Known	None Known
Carbonate salt ( 1-5 )	None Known	None Known	None Known	None Known
Potassium salt ( 5-10 )	None Known	None Known	None Known	None Known
Potassium iodide 7681-11-0 ( 5-15 )	None Known	None Known	None Known	None Known
Boric acid 10043-35-3 ( 5-15 )	None Known	None Known	None Known	None Known
Excipient / tableting aid ( 25-35 )	None Known	None Known	None Known	None Known
Phosphate salt ( 30-40 )	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
Excipient / tableting aid		<0.2	None Known	None Known	None Known	None Known
Polymer		<1	None Known	None Known	None Known	None Known
N,N-Diethyl-p-phenyle nediamine sulfate	6283-63-2	1	None Known	None Known	None Known	None Known
Chelants		<2	None Known	None Known	None Known	None Known
Resin / excipient		1-5	None Known	None Known	None Known	None Known
Carbonate salt		1-5	None Known	None Known	None Known	None Known
Potassium salt		5-10	None Known	None Known	None Known	None Known
Potassium iodide	7681-11-0	5-15	None Known	None Known	None Known	None Known
Boric acid	10043-35-3	5-15	None Known	None Known	None Known	None Known
Excipient / tableting aid		25-35	None Known	None Known	None Known	None Known
Phosphate salt		30-40	None Known	None Known	None Known	None Known

## **CERCLA**

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Excipient / tableting aid	None Known	None Known
Polymer	None Known	None Known
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known
Chelants	None Known	None Known
Resin / excipient	None Known	None Known
Carbonate salt	None Known	None Known
Potassium salt	None Known	None Known

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Potassium iodide	None Known	None Known
Boric acid	None Known	None Known
Excipient / tableting aid	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
Excipient / tableting aid		None Known
Polymer		None Known
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	None Known
Chelants		None Known
Resin / excipient		None Known
Carbonate salt		None Known
Potassium salt		None Known
Potassium iodide	7681-11-0	None Known
Boric acid	10043-35-3	None Known
Excipient / tableting aid		None Known
Phosphate salt		None Known

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Excipient / tableting aid	None Known	None Known	None Known	None Known	None Known
Polymer	None Known	None Known	None Known	None Known	None Known
N,N-Diethyl-p-phenylenedia mine sulfate	None Known	None Known	None Known	None Known	None Known
Chelants	None Known	None Known	None Known	None Known	None Known
Resin / excipient	None Known	None Known	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known	None Known	None Known
Potassium iodide	None Known	None Known	None Known	None Known	None Known
Boric acid	None Known	Х	None Known	None Known	None Known
Excipient / tableting aid	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
Excipient / tableting aid	None Known	None Known
Polymer	None Known	None Known
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known
Chelants	None Known	None Known
Resin / excipient	None Known	None Known
Carbonate salt	None Known	None Known
Potassium salt	None Known	None Known
Potassium iodide	None Known	None Known
Boric acid	None Known	None Known
Excipient / tableting aid	None Known	None Known
Phosphate salt	None Known	None Known

### Canada

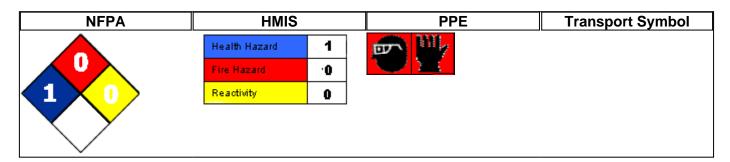
Component	WHMIS Hazard Class

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Excipient / tableting aid ( <0.2 )	Not determined
Polymer ( <1 )	Uncontrolled product according to WHMIS classification criteria
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2 ( 1 )	Not determined
Chelants ( <2 )	Uncontrolled product according to WHMIS classification criteria
Resin / excipient (1-5)	Not determined
Carbonate salt ( 1-5 )	1 % D2B E
Potassium salt ( 5-10 )	Uncontrolled product according to WHMIS classification criteria
Potassium iodide 7681-11-0 ( 5-15 )	1 % D2A
Boric acid 10043-35-3 ( 5-15 )	1 % D2A
Excipient / tableting aid ( 25-35 )	Uncontrolled product according to WHMIS classification criteria
Phosphate salt ( 30-40 )	Uncontrolled product according to WHMIS classification criteria



## 16. OTHER INFORMATION



Prepared By Regulatory Affairs Department

Issuing Date 12/6/2011

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Revision Note Initial Release

#### 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**