Safety Data Sheet

Issuing Date Nov-15-2010 **Revision Date** Jan-12-2015 **Revision Number** 0

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product name **DPD 1R Test Tablet**

Other means of identification

Product Code(s) **6999**

Recommended use of the chemical and restrictions on use

Recommended Use Test kit reagent for water testing. Laboratory chemicals. Research and Development. Professional users.

Details of the supplier of the safety data sheet

Manufacturer Address
LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

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

Carcinogenicity	Category 1B
Reproductive Toxicity	Category 1B

EMERGENCY OVERVIEW

DANGER

Hazard statements
May cause cancer. May damage fertility or the unborn child.

Appearance White to off-white **Physical state** solid Tablet **Odor** Odorless

Precautionary Statements - Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage
Store locked up.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Other Hazards
May be harmful in contact with skin

Unknown Aquatic Toxicty
59% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation Mixture of organic and inorganic compounds.

Chemical name	CAS-No	Weight %
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	1
Excipient	-	1-10
Boric acid	10043-35-3	9
Citric acid	77-92-9	13
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

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. Consult a physician.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Call a physician immediately.

Ingestion 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.

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.

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

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water spray, dry chemical, carbon dioxide (CO_2), or foam.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Refer to Section 8. Use personal protective equipment.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent dust cloud. 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 Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

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.

Conditions for safe storage, including any incompatibilities

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.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	-	-	None Established
Excipient	TWA: 10 mg/m^3	TWA: 15 mg/m^3 TWA: 5 mg/m^3	TWA: 1 mg/m^3
Boric acid 10043-35-3	6 mg/m^3 STEL (inhalable fraction, listed under Borate compounds, inorganic) 6 mg/m^3 STEL (inhalable fraction) TWA: 2 mg/m^3	-	None Established
Citric acid 77-92-9	-	-	None Established
Carbonate salt	-	-	None Established
Excipient	-	-	None Established
Phosphate salt	-	-	None Established

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as 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. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	solid Tablet		
Appearance	White to off-white	**Odor**	Odorless

Property	**Values**	**Remarks • Method**
pH	6	(1 tablet in 10mL of water)
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Stability	Stable.
Hazardous Reactions	Hazardous polymerization does not occur.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None under normal use.

11. TOXICOLOGICAL INFORMATION

Product Information May cause eye, skin, and respiratory tract irritation.

Information on likely routes of exposure

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Established	None Established	None Established
Excipient	> 5 g/kg (Rat)	> 2 g/kg (Rabbit)	> 5800 mg/m³ (Rat) 4 h
Boric acid 10043-35-3	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (Rat) 4 h
Citric acid 77-92-9	= 3000 mg/kg (Rat)	None Established	None Established
Carbonate salt	= 1870 mg/kg (Rat)	None Established	None Established
Excipient	> 10 g/kg (Rat)	None Established	None Established
Phosphate salt	None Established	> 4640 mg/kg (Rabbit)	None Established

Information on toxicological effects

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	-	None Established	None Established	-
Excipient	-	None Established	None Established	-
Boric acid 10043-35-3	-	Group 2A	None Established	X
Citric acid 77-92-9	-	None Established	None Established	-
Carbonate salt	-	None Established	None Established	-
Excipient	-	None Established	None Established	-
Phosphate salt	-	None Established	None Established	-

IARC: (International Agency for Research on Cancer)
Group 2A - Probably Carcinogenic to Humans

Reproductive toxicity Product is or contains a chemical which is a known or suspected reproductive hazard. Contains a known or suspected reproductive toxin.

Developmental toxicity No information available.

Teratogenic May cause harm to the unborn child.

Target organ effects No information available.

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (dermal) 3129 mg/kg

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 78.3% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)

N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Established	None Established	None Established
Excipient	None Established	None Established	None Established
Boric acid 10043-35-3	None Established	1020: 72 h Carassius auratus mg/L LC50 flow-through	115 - 153: 48 h Daphnia magna mg/L EC50
Citric acid 77-92-9	None Established	1516: 96 h Lepomis macrochirus mg/L LC50 static	120: 72 h Daphnia magna mg/L EC50
Carbonate salt	None Established	None Established	None Established
Excipient	None Established	None Established	None Established
Phosphate salt	None Established	None Established	None Established

Persistence and degradability
No data is available on the product itself.

Bioaccumulation/Accumulation
No information available.

Chemical name	Log Pow
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Established
Excipient	None Established
Boric acid 10043-35-3	-0.757
Citric acid 77-92-9	-1.72
Carbonate salt	None Established
Excipient	None Established
Phosphate salt	None Established

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	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Established	-	None Established	None Established
Excipient	None Established	-	None Established	None Established
Boric acid 10043-35-3	None Established	-	None Established	None Established
Citric acid 77-92-9	None Established	-	None Established	None Established
Carbonate salt	None Established	-	None Established	None Established
Excipient	None Established	-	None Established	None Established
Phosphate salt	None Established	-	None Established	None Established

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 Established	None Established	None Established	None Established
Excipient	None Established	None Established	None Established	None Established
Boric acid 10043-35-3	None Established	None Established	None Established	None Established
Citric acid 77-92-9	None Established	None Established	None Established	None Established
Carbonate salt	None Established	None Established	None Established	None Established
Excipient	None Established	None Established	None Established	None Established
Phosphate salt	None Established	None Established	None Established	None Established

Chemical name	California Hazardous Waste Status
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	-
Excipient	-
Boric acid 10043-35-3	-
Citric acid 77-92-9	-
Carbonate salt	-
Excipient	-
Phosphate salt	-

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

RID Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

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	SARA 313 - Threshold Values %
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Established
Excipient	None Established
Boric acid 10043-35-3	None Established
Citric acid 77-92-9	None Established
Carbonate salt	None Established
Excipient	None Established
Phosphate salt	None Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
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 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Established	None Established	None Established	None Established
Excipient	None Established	None Established	None Established	None Established
Boric acid 10043-35-3	None Established	None Established	None Established	None Established
Citric acid 77-92-9	None Established	None Established	None Established	None Established
Carbonate salt	None Established	None Established	None Established	None Established
Excipient	None Established	None Established	None Established	None Established
Phosphate salt	None Established	None Established	None Established	None Established

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	-	None Established	-

Excipient	-	None Established	-
Boric acid 10043-35-3	-	None Established	-
Citric acid 77-92-9	-	None Established	-
Carbonate salt	-	None Established	-
Excipient	-	None Established	-
Phosphate salt	-	None Established	-

U.S. State Regulations

California Proposition 65

Chemical name	California Prop. 65
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Established
Excipient	None Established
Boric acid 10043-35-3	None Established
Citric acid 77-92-9	None Established
Carbonate salt	None Established
Excipient	None Established
Phosphate salt	None Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Established	None Established	None Established
Excipient	X	X	X
Boric acid 10043-35-3	None Established	None Established	None Established
Citric acid 77-92-9	None Established	None Established	None Established
Carbonate salt	None Established	None Established	None Established
Excipient	None Established	None Established	None Established
Phosphate salt	None Established	None Established	None Established

16. OTHER INFORMATION

NFPA **Health hazard** 1 **Flammability** 0 **Instability** 0 **Physical and Chemical Hazards** N/A

HMIS **Health hazard** 1 **Flammability** 0 **Physical hazards** 0 **Personal precautions** N/A

Health Hazard	1
Fire Hazard	0
Reactivity	0

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Disclaimer

The information provided on this SDS 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