

Safety Data Sheet

OSHA format Revision Number 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier **Product name DPD 1B Free Chlorine Reagent** Other means of identification Product Code(s) P-6741 UN-No 3265 Recommended use of the chemical and restrictions on use **Recommended Use** Use as a laboratory reagent. Industrial (not for food or food contact use). Laboratory chemicals. 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 numbers

(CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

EMERGENCY OVERVIEW

DANGER		
Hazard statements Causes severe skin burns and eye damage		
Appearance Clear, colorless	Physical state liquid	Odor Odorless

Precautionary Statements - Prevention

Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response: Immediately call a poison center or physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage:

Store locked up. Disposal: Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS*

Chemical name	CAS No.	Weight-%
Non-hazardous ingredients	N/A	balance
Phosphorous acid	13598-36-2	<0.2
DPD Sulfate	6283-63-2	<1
Carboxylic acid	*_	1-5
Etidronic acid	2809-21-4	1-5
Water	7732-18-5	to 100%

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret. *The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

General advice

Do not get in eyes, on skin, or on clothing.

Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician immediately.	
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.	
Ingestion	Do NOT induce vomiting. Drink plenty of water. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.	
Self-protection of the first aider	Use personal protective equipment. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give 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.	
5. FIREFIGHTING MEASURES		

<u>Suitable extinguishing media</u> Water spray. Dry chemical. Carbon dioxide (CO₂). 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	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. See section 8.		
Environmental precautions	See Section 12 for additional Ecological Information. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.		
Methods and material for contain	ment and cleaning up		
Methods for containment	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.		
Methods for cleaning up	Pick up and transfer to properly labeled containers. 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. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Do not eat, drink or smoke when using this product.
Conditions for safe storage, includi	ng any incompatibilities
Storage:	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Keep away from heat. Keep out of the reach of children.
Incompatible Products	Alkalis. Metals. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Non-hazardous ingredients N/A	*_	*_	Not Established
Phosphorous acid 13598-36-2	*_	*_	Not Established
DPD Sulfate 6283-63-2	*_	*_	Not Established
Carboxylic acid	*_	*_	Not Established
Etidronic acid 2809-21-4	*_	*_	Not Established
Water 7732-18-5	*_	*_	Not Established

Appropriate engineering controls

Engineering Measures	Showers Eyewash stations Ventilation systems.
Individual protection measures, su	ich as personal protective equipment
Eye/Face Protection	Wear safety glasses with side shields (or goggles). Avoid contact with eyes.
Skin and body protection	Protective gloves. Neoprene™. Nitrile rubber.
Respiratory protection	Use only with adequate ventilation.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance	liquid Clear, colorless	Odor	Odorless
Property	<u>Values</u>	Remarks • Method	
pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density Specific gravity Water solubility Solubility in other solvents Partition coefficient	1.4 No information available No information available Not Applicable No information available No information available No information available No information available No information available Soluble in water No information available		
Autoignition temperature	No information available		

Bulk density	No information available
Density	No information available
VOC Content (%)	No information available
Molecular weight	No information available
Softening point	No information available
Other Information	
Oxidizing properties	No information available
Explosive properties	No information available
Dynamic viscosity	No information available
Kinematic viscosity	No information available
Decomposition temperature	No information available

10. STABILITY AND REACTIVITY

Stability Hazardous polymerization	Stable. Hazardous polymerization does not occur.
Conditions to avoid	Extremes of temperature and direct sunlight. Excessive heat.
Incompatible materials	Alkalis. Metals. Strong oxidizing agents.

Hazardous decomposition products Hazardous decomposition products. Carbon oxides (COx).

11. TOXICOLOGICAL INFORMATION

Product Information

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

Information on likely routes of exposure

Component identification

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Non-hazardous ingredients N/A	Not Established	Not Established	Not Established
Phosphorous acid 13598-36-2	= 1895 mg/kg (Rat)	Not Established	Not Established
DPD Sulfate 6283-63-2	Not Established	Not Established	Not Established
Carboxylic acid	= 3 g/kg (Rat) = 3000 mg/kg (Rat	Not Established	Not Established
Etidronic acid 2809-21-4	= 2400 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	Not Established
Water 7732-18-5	> 90 mL/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Non-hazardous ingredients N/A	Not Established	Not Established	Not Established	Not Established
Phosphorous acid 13598-36-2	Not Established	Not Established	Not Established	Not Established
DPD Sulfate 6283-63-2	Not Established	Not Established	Not Established	Not Established
Carboxylic acid	Not Established	Not Established	Not Established	Not Established
Etidronic acid 2809-21-4	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established

Chronic toxicity

Repeated contact may cause allergic reactions in very susceptible persons.

ATEmix (oral)

57,971.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 2.46 % 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)
Non-hazardous ingredients N/A	Not Established	Not Established	Not Established
Phosphorous acid 13598-36-2	Not Established	6980 - 9784: 96 h Brachydanio rerio mg/L LC50 static	Not Established
DPD Sulfate 6283-63-2	Not Established	Not Established	Not Established
Carboxylic acid	Not Established	1516: 96 h Lepomis macrochirus mg/L LC50 static	120: 72 h Daphnia magna mg/L EC50
Etidronic acid 2809-21-4	Not Established	360: 96 h Oncorhynchus mykiss mg/L LC50 static 868: 96 h Lepomis macrochirus mg/L LC50 static	527: 48 h Daphnia magna mg/L EC50
Water 7732-18-5	Not Established	Not Established	Not Established

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Non-hazardous ingredients	Not Established
N/A	
Phosphorous acid	Not Established
13598-36-2	
DPD Sulfate	Not Established
6283-63-2	
Carboxylic acid	-1.72
Etidronic acid	3.49
2809-21-4	
Water	Not Established
7732-18-5	

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of waste product or used containers according to local regulations.

Contaminated packaging

Dispose of waste product or used containers according to local regulations.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Non-hazardous ingredients N/A	Not Established	-	Not Established	Not Established
Phosphorous acid 13598-36-2	Not Established	-	Not Established	Not Established
DPD Sulfate 6283-63-2	Not Established	-	Not Established	Not Established
Carboxylic acid	Not Established	-	Not Established	Not Established
Etidronic acid 2809-21-4	Not Established	-	Not Established	Not Established
Water 7732-18-5	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Non-hazardous ingredients	Not Established	Not Established	Not Established	Not Established

P-6741 *- DPD 1B Free Chlorine Reagent

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N/A				
Phosphorous acid 13598-36-2	Not Established	Not Established	Not Established	Not Established
DPD Sulfate 6283-63-2	Not Established	Not Established	Not Established	Not Established
Carboxylic acid	Not Established	Not Established	Not Established	Not Established
Etidronic acid 2809-21-4	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Non-hazardous ingredients N/A	*_
Phosphorous acid 13598-36-2	*_
DPD Sulfate 6283-63-2	*_
Carboxylic acid	*_
Etidronic acid 2809-21-4	*_
Water 7732-18-5	*_

14. TRANSPORT INFORMATION

DOT UN-No Proper shipping name Hazard Class Packing group	3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Phosphorous Acid) 8 III
TDG	Not regulated
MEX	Not regulated
ICAO UN-No Proper shipping name Hazard Class Packing group	3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Phosphonic Acid) 8 III
<u>IATA</u> UN-No Proper shipping name Hazard Class Packing group	3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Phosphonic Acid) 8 III
IMDG/IMO UN-No Proper shipping name Hazard Class Packing group	3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Phosphonic Acid) 8 III
<u>RID</u>	Not regulated
ADR	Not regulated
ADN	Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

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 Chemical Substances/European 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

US 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 %
Non-hazardous ingredients N/A	Not Established
Phosphorous acid 13598-36-2	Not Established
DPD Sulfate 6283-63-2	Not Established
Carboxylic acid	Not Established
Etidronic acid 2809-21-4	Not Established
Water 7732-18-5	Not Established
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

CWA (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
Non-hazardous ingredients N/A	Not Established	Not Established	Not Established	Not Established
Phosphorous acid 13598-36-2	Not Established	Not Established	Not Established	Not Established
DPD Sulfate 6283-63-2	Not Established	Not Established	Not Established	Not Established
Carboxylic acid	Not Established	Not Established	Not Established	Not Established
Etidronic acid 2809-21-4	Not Established	Not Established	Not Established	Not Established
Water	Not Established	Not Established	Not Established	Not Established

7732-18-5		

<u>CERCLA</u>

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
Non-hazardous ingredients N/A	*_	Not Established	-
Phosphorous acid 13598-36-2	*_	Not Established	-
DPD Sulfate 6283-63-2	*_	Not Established	-
Carboxylic acid	*-	Not Established	-
Etidronic acid 2809-21-4	*_	Not Established	-
Water 7732-18-5	*_	Not Established	-

US State Regulations

Chemical name	California Proposition 65	
Non-hazardous ingredients	Not Established	
N/A		
Phosphorous acid	Not Established	
13598-36-2		
DPD Sulfate	Not Established	
6283-63-2		
Carboxylic acid	Not Established	
Etidronic acid	Not Established	
2809-21-4		
Water	Not Established	
7732-18-5		

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Non-hazardous ingredients N/A	Not Established	Not Established	Not Established
Phosphorous acid 13598-36-2	Х	Not Established	Not Established
DPD Sulfate 6283-63-2	Not Established	Not Established	Not Established
Carboxylic acid	Not Established	Not Established	Not Established
Etidronic acid 2809-21-4	Not Established	Not Established	Not Established
Water Not Established 7732-18-5		Not Established	Х

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

16. OTHER INFORMATION							
NFPA	Health hazard 1	Flammability 0	Instability 0	Physical and Chemical Hazards N/A			
<u>HMIS</u>	Health hazard 2	Flammability 0	Stability 0	Hazards N/A			



Prepared by Issuing Date Reason for revision <u>Disclaimer</u>

Regulatory Affairs Department Jan-24-2017

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 Safety Data Sheet