

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

### Product identifier

Product name Total Iron Tablets

### Other means of identification

Product Code(s) 2792A

UN-No 3260

### 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 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

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Serious eye damage/eye irritation	Category 1

### EMERGENCY OVERVIEW

#### DANGER

#### Hazard statements

Harmful if swallowed. Harmful in contact with skin. Causes serious eye damage.



Appearance Gray

Physical state powder

Odor Slight Sulphurous

#### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

IF ON SKIN: Wash with plenty of soap and water.

Call a POISON CENTER or doctor/physician if you feel unwell  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell, Rinse mouth

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Other Hazards**

Harmful to aquatic life with long lasting effects

**Unknown Acute Toxicity**

52.5% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Sodium dithionite	7775-14-6	15
Sodium metabisulfite	7681-57-4	25-30

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5013p, and may be disclosed only in a medical emergency

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>General advice</b>	Do not get in eyes, on skin, or on clothing. Show this safety data sheet to the doctor in attendance.
<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.
<b>Inhalation</b>	Remove to fresh air. If symptoms arise, call a physician.
<b>Ingestion</b>	Drink plenty of water. Clean mouth with water. Never give anything by mouth to an unconscious person. Consult a physician. Rinse mouth.
<b><u>Self-protection of the first aider</u></b>	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.
<b>Notes to Physician</b>	Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), 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** See section 8.
- Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

- Methods for containment** Sweep up in a manner that does not disperse dust and shovel into suitable containers for disposal. Dispose according to federal, state, and local regulations.
- Methods for cleaning up** Use personal protective equipment. Avoid dust formation. 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 taste or swallow. 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. Store away from incompatible materials. Keep out of the reach of children.
- Incompatible Products** Acids. Alkalis. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium dithionite 7775-14-6	-	-	Not Established
Sodium metabisulfite 7681-57-4	TWA: 5 mg/m <sup>3</sup>	-	TWA: 5 mg/m <sup>3</sup>

### Appropriate engineering controls

- Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

- Eye/Face Protection** Wear safety glasses with side shields (or goggles). Goggles.
- Skin and body protection** Wear protective gloves/clothing.
- Respiratory protection** Maintain adequate ventilation.
- Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state** powder  
**Appearance** Gray **Odor** Slight Sulphurous

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	3.75	0.3g in 10mL water
<b>Melting point / freezing point</b>	150 °C No information available	Sodium metabisulfite
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	No information available	
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific gravity</b>	No information available	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	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 under normal conditions of use and storage.  
**Hazardous Reactions** None under normal processing.  
**Hazardous polymerization** Hazardous polymerization does not occur.  
**Conditions to avoid** Excessive heat. Exposure to air or moisture over prolonged periods. Keep away from children.  
**Incompatible materials** Acids. Alkalis. Strong oxidizing agents.  
**Hazardous decomposition products** Carbon oxides (COx). Sulfur oxides (SOx). Sodium oxides.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium dithionite 7775-14-6	= 2500 mg/kg ( Rat )	Not Established	Not Established
Sodium metabisulfite 7681-57-4	= 1310 mg/kg ( Rat )	> 2 g/kg ( Rat )	Not Established

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA

Sodium dithionite 7775-14-6	Not Established	Not Established	Not Established	Not Established
Sodium metabisulfite 7681-57-4	Not Established	Group 3	Not Established	Not Established

ATEmix (oral) 492  
ATEmix (dermal) 1489 mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Unknown Aquatic Toxicity** 58 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Sodium dithionite 7775-14-6	120: 72 h Desmodesmus subspicatus mg/L EC50 87: 96 h Desmodesmus subspicatus mg/L EC50	46 - 68: 96 h Leuciscus idus mg/L LC50 static	98: 48 h Daphnia magna Straus mg/L EC50
Sodium metabisulfite 7681-57-4	40: 96 h Desmodesmus subspicatus mg/L EC50 48: 72 h Desmodesmus subspicatus mg/L EC50	32: 96 h Lepomis macrochirus mg/L LC50 static	89: 24 h Daphnia magna Straus mg/L EC50

### Persistence and degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Sodium dithionite 7775-14-6	Not Established
Sodium metabisulfite 7681-57-4	-3.7

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Dispose of contents/containers in accordance with local regulations. This material, as supplied, is not a hazardous waste according to state and Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste pursuant to Federal regulations, and the applicable state requirements for the specific area of disposal. Consult the appropriate state, regional, or local regulations for additional requirements.

### Contaminated packaging

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Sodium dithionite 7775-14-6	Not Established	-	Not Established	Not Established
Sodium metabisulfite 7681-57-4	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium dithionite 7775-14-6	Not Established	Not Established	Not Established	Not Established
Sodium metabisulfite 7681-57-4	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Sodium dithionite 7775-14-6	-

Sodium metabisulfite 7681-57-4	-
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### 14. TRANSPORT INFORMATION

**DOT**

**Proper shipping name** CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.(SODIUM DISULPHITE)  
**UN-No** 3260  
**Hazard Class** 8  
**Packing group** III

**IATA**

**Proper shipping name** CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.(SODIUM DISULPHITE)  
**UN-No** 3260  
**Hazard Class** 8  
**Packing group** III

**IMDG/IMO**

**Proper shipping name** CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.(SODIUM DISULPHITE)  
**UN-No** 3260  
**Hazard Class** 8

### 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 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 contains a chemical or 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 %
Sodium dithionite 7775-14-6	Not Established
Sodium metabisulfite 7681-57-4	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 Yes

**CWA (Clean Water Act)**

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium dithionite 7775-14-6	Not Established	Not Established	Not Established	Not Established
Sodium metabisulfite 7681-57-4	Not Established	Not Established	Not Established	Not 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
Sodium dithionite 7775-14-6	-	Not Established	-
Sodium metabisulfite 7681-57-4	-	Not Established	-

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical name	California Proposition 65
Sodium dithionite 7775-14-6	Not Established
Sodium metabisulfite 7681-57-4	Not Established

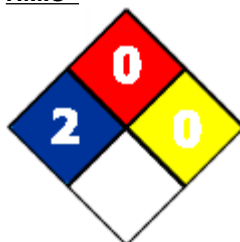
**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium dithionite 7775-14-6	X	X	X
Sodium metabisulfite 7681-57-4	X	X	X

**CPSC (Consumer Product Safety Commission) - Specially Regulated Substances**

**16. OTHER INFORMATION**

**NFPA** Health hazard 2 Flammability 0 Instability 0 Physical and Chemical Hazards N/A  
**HMIS** Health hazard 2 Flammability 0 Stability 0



Health Hazard	2
Fire Hazard	0
Reactivity	0

Prepared by Regulatory Affairs Department  
Issuing Date Feb-10-2015  
Revision Date Jun-25-2015  
Reason for revision New US GHS format

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 Material Safety Data Sheet**



**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product name** Copper HR Tablets**Other means of identification****Product Code(s)** 3701A**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 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****OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

**EMERGENCY OVERVIEW****Appearance** purple**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. Keep out of the reach of children.

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED. Drink 1 or 2 glasses of water. Call a physician immediately.

**Precautionary Statements - Storage**

Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Other Hazards**

May be harmful if swallowed May cause skin and eye irritation

**3. COMPOSITION/INFORMATION ON INGREDIENTS\***

Chemical name	CAS No	Weight-%
Zincon monosodium salt	62625-22-3	<1
Boric acid	10043-35-3	25

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5014p, and may be disclosed only in a medical emergency  
All ingredients may not be listed. Ingredients not listed do not meet the reporting requirements of the OSHA Hazard Communication Standard (HCS) as specified in 29 CFR 1910.1200.

**4. FIRST AID MEASURES****First Aid Measures**

<b>General advice</b>	Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. If symptoms persist, call a physician.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Drink plenty of water. Do not induce vomiting without medical advice. Call a physician immediately. Never give anything by mouth to an unconscious person.
<b><u>Self-protection of the first aider</u></b>	Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

**5. FIREFIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**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**

<b>Personal precautions</b>	Use personal protection recommended in Section 8.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
<b><u>Methods and material for containment and cleaning up</u></b>	
<b>Methods for containment</b>	Prevent dust cloud.
<b>Methods for cleaning up</b>	Avoid dust formation. Sweep up and shovel into suitable containers for disposal. Keep in suitable and closed containers for disposal.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Do not taste or swallow. Avoid contact with skin, eyes or clothing. 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. Protect from sunlight.

**Incompatible Products** None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zincon monosodium salt 62625-22-3	-	-	Not Established
Boric acid 10043-35-3	STEL: 6 mg/m <sup>3</sup> inhalable fraction TWA: 2 mg/m <sup>3</sup> inhalable fraction	-	Not Established

**Appropriate engineering controls**

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

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles). Avoid contact with eyes.

**Skin and body protection** Rubber gloves. Nitrile rubber.

**Respiratory protection** None required under normal usage.

**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.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

**Physical state** solid Tablet  
**Appearance** purple  
**Odor** Odorless

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	Not Applicable	
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	

<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

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

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Component identification**

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Zincon monosodium salt 62625-22-3	Not Established	Not Established	Not Established
Boric acid 10043-35-3	= 2660 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 0.16 mg/L ( Rat ) 4 h

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Zincon monosodium salt 62625-22-3	Not Established	Not Established	Not Established	Not Established
Boric acid 10043-35-3	Not Established	Group 2A	Not Established	Not Established

<b>ATEmix (oral)</b>	2,699.00 mg/kg
<b>ATEmix (dermal)</b>	8,000.00 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

**Unknown Aquatic Toxicity** 52.1 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Zincon monosodium salt 62625-22-3	Not Established	Not Established	Not Established
Boric acid 10043-35-3	Not Established	1020: 72 h Carassius auratus mg/L LC50 flow-through	115 - 153: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical name	Log Pow
Zincon monosodium salt 62625-22-3	Not Established
Boric acid 10043-35-3	-0.757

### 13. DISPOSAL CONSIDERATIONS

**Disposal Methods** Dispose of waste product or used containers according to local regulations. Can be incinerated, when in compliance with local regulations. Should not be released into the environment.

**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
Zincon monosodium salt 62625-22-3	Not Established	-	Not Established	Not Established
Boric acid 10043-35-3	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Zincon monosodium salt 62625-22-3	Not Established	Not Established	Not Established	Not Established
Boric acid 10043-35-3	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Zincon monosodium salt 62625-22-3	-
Boric acid 10043-35-3	Toxic

### 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	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - 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 %
Zincon monosodium salt 62625-22-3	Not Established
Boric acid 10043-35-3	Not 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

**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
Zincon monosodium salt 62625-22-3	Not Established	Not Established	Not Established	Not Established
Boric acid 10043-35-3	Not Established	Not Established	Not Established	Not 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
Zincon monosodium salt 62625-22-3	-	Not Established	-
Boric acid 10043-35-3	-	Not Established	-

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical name	California Proposition 65
Zincon monosodium salt 62625-22-3	Not Established
Boric acid 10043-35-3	Not Established

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Zincon monosodium salt 62625-22-3	Not Established	Not Established	Not Established

Boric acid 10043-35-3	X	Not Established	Not Established
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**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

Health hazard 1



Health Hazard	1
Fire Hazard	0
Reactivity	0

**Prepared by**  
**Issuing Date**  
**Reason for revision**

Regulatory Affairs Department  
May-26-2015  
(M)SDS sections updated 2 11 Software error caused EU data to be pulled into US OSHA SDS. This error incorrectly classified Boric acid as a carcinogen in the US.

**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 Safety Data Sheet**

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

**Product identifier**

**Product name** Nitrate CTA TesTabs

**Other means of identification**

**Product Code(s)** 3703A

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Laboratory chemicals. Use as a laboratory reagent.

**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**

Skin sensitization	Category 1
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**EMERGENCY OVERVIEW**

**WARNING**

**Hazard statements**

May cause an allergic skin reaction.



**Appearance** Gray **Physical state** Tablet **Odor** Odorless

**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED, Drink 1 or 2 glasses of water, Call a physician immediately



**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Other Hazards**

Causes mild skin irritation Very toxic to aquatic life with long lasting effects

**Unknown Acute Toxicity**

19% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Zinc; Zinc Dust	7440-66-6	1
Sulfanilic acid	121-57-3	1

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5074p, and may be disclosed only in a medical emergency

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>General advice</b>	Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off with warm water and soap. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
<b><u>Self-protection of the first aider</u></b>	Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**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**

<b>Personal precautions</b>	Use personal protection recommended in Section 8.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
<b><u>Methods and material for containment and cleaning up</u></b>	
<b>Methods for containment</b>	Prevent dust cloud. Contain and collect spillage with non-combustible absorbent material,

(e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

**Methods for cleaning up** 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. Do not taste or swallow. Avoid contact with skin, eyes or clothing. 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** Nitric acid. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc; Zinc Dust 7440-66-6	-	-	Not Established
Sulfanilic acid 121-57-3	-	-	Not Established

### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Avoid contact with eyes. If splashes are likely to occur: Wear safety glasses with side shields (or goggles).

**Skin and body protection** No special protective equipment required.

**Respiratory protection** None required under normal usage.

**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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state** Tablet  
**Appearance** Gray  
**Odor** Odorless

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	3	No information available
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	No information available	
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		

<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.
<b>Incompatible materials</b>	Nitric acid. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides (COx). Nitrogen oxides (NOx). Sulfur oxides (SOx).

**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 Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Zinc; Zinc Dust 7440-66-6	Not Established	Not Established	Not Established
Sulfanilic acid 121-57-3	= 12300 mg/kg ( Rat )	Not Established	Not Established

**Information on toxicological effects**

**Sensitization** No information available

Chemical name	ACGIH	IARC	NTP	OSHA
Zinc; Zinc Dust 7440-66-6	-	Not Established	Not Established	-
Sulfanilic acid 121-57-3	-	Not Established	Not Established	-

**Chronic toxicity** Product does not present a chronic toxicity hazard based on known or supplied information.

<b>ATEmix (oral)</b>	20345
<b>ATEmix (dermal)</b>	9396 mg/kg
<b>Dermal LD50</b>	No information available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity****Unknown Aquatic Toxicity** 98 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Zinc; Zinc Dust 7440-66-6	0.09 - 0.125: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.11 - 0.271: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	0.211 - 0.269: 96 h Pimephales promelas mg/L LC50 semi-static 2.16 - 3.05: 96 h Pimephales promelas mg/L LC50 flow-through 0.24: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.41: 96 h Oncorhynchus mykiss mg/L LC50 static 0.45: 96 h Cyprinus carpio mg/L LC50 semi-static 0.59: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 2.66: 96 h Pimephales promelas mg/L LC50 static 3.5: 96 h Lepomis macrochirus mg/L LC50 static 30: 96 h Cyprinus carpio mg/L LC50 7.8: 96 h Cyprinus carpio mg/L LC50 static	0.139 - 0.908: 48 h Daphnia magna mg/L EC50 Static
Sulfanilic acid 121-57-3	91: 72 h Desmodesmus subspicatus mg/L EC50	77.8 - 129.6: 96 h Pimephales promelas mg/L LC50 static	85.66: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical name	Log Pow
Zinc; Zinc Dust 7440-66-6	Not Established
Sulfanilic acid 121-57-3	-0.9

**13. DISPOSAL CONSIDERATIONS****Disposal Methods**

Dispose according to federal, state, and local regulations. If permitted, dissolve in large volume of water, neutralize pH with dilute base, rinse to drain with excess water.

**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
Zinc; Zinc Dust 7440-66-6	Not Established	-	Not Established	Not Established
Sulfanilic acid 121-57-3	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Zinc; Zinc Dust 7440-66-6	Not Established	Not Established	Not Established	Not Established
Sulfanilic acid 121-57-3	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Zinc; Zinc Dust 7440-66-6	-
Sulfanilic acid 121-57-3	-

**14. TRANSPORT INFORMATION**

DOT Not regulatedIATA Not regulatedIMDG/IMO Not regulated**15. REGULATORY INFORMATION****International Inventories**

**TSCA** Complies  
**DSL/NDSL** Complies  
**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 contains a chemical or 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 %
Zinc; Zinc Dust 7440-66-6	1.0
Sulfanilic acid 121-57-3	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
Zinc; Zinc Dust 7440-66-6	Not Established	X	X	Not Established
Sulfanilic acid 121-57-3	Not Established	Not Established	Not Established	Not 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
Zinc; Zinc Dust 7440-66-6	1000 lb	Not Established	RQ 454 kg final RQ RQ 1000 lb final RQ
Sulfanilic acid 121-57-3	-	Not Established	-

### US State Regulations

This product does not contain any Proposition 65 chemicals

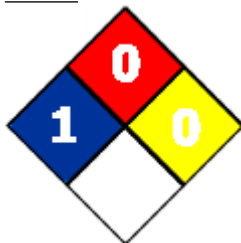
### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Zinc; Zinc Dust 7440-66-6	X	X	X
Sulfanilic acid 121-57-3	Not Established	Not Established	Not Established

## 16. OTHER INFORMATION

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

**HMIS** Health hazard 1 Flammability 0 Stability 0



Health Hazard	1
Fire Hazard	0
Reactivity	0

Prepared by Regulatory Affairs Department  
 Issuing Date May-26-2015  
 Revision Date May-26-2015  
 Reason for revision New US GHS format

### Disclaimer

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**End of Material Safety Data Sheet**

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product name** Dissolved Oxygen Tablets**Other means of identification****Product Code(s)** 3976A**Recommended use of the chemical and restrictions on use****Recommended Use** Laboratory chemicals. Research and Development.**Details of the supplier of the safety data sheet**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****OSHA Regulatory Status**

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

**EMERGENCY OVERVIEW****Appearance** Gray **Physical state** solid Tablet **Odor** Odorless**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Keep out of reach of children.

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Drink 1 or 2 glasses of water. Call a physician immediately.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

**3. COMPOSITION/INFORMATION ON INGREDIENTS\***

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5074p, and may be disclosed only in a medical emergency

#### 4. FIRST AID MEASURES

##### First Aid Measures

<b>General advice</b>	Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. If symptoms persist, call a physician.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
<b><u>Self-protection of the first aider</u></b>	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.

#### 5. FIREFIGHTING MEASURES

##### Suitable extinguishing media

Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), 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

<b>Personal precautions</b>	See section 8.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.

##### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
<b>Methods for cleaning up</b>	Sweep up and shovel into suitable containers for disposal. Keep in suitable and closed containers for disposal. If local regulations permits small amounts (<50 tablets), dissolve and rinse to drain with excess water.

#### 7. HANDLING AND STORAGE

##### Precautions for safe handling

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.
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##### Conditions for safe storage, including any incompatibilities



<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, moisture, and incompatibles. Keep out of the reach of children.
<b>Incompatible Products</b>	None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

### Appropriate engineering controls

<b>Engineering Measures</b>	Showers Eyewash stations Ventilation systems.
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### Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	Wear safety glasses with side shields (or goggles). Avoid contact with eyes.
<b>Skin and body protection</b>	Gloves & Lab Coat.
<b>Respiratory protection</b>	None required under normal usage.
<b>Hygiene Measures</b>	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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	solid Tablet	<b>Odor</b>	Odorless
<b>Appearance</b>	Gray		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	8	
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	Not Applicable	
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific gravity</b>	No information available	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

### Other Information

<b>Softening point</b>	No information available
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<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable.
<b>Hazardous Reactions</b>	Hazardous polymerization does not occur.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Exposure to air or moisture over prolonged periods. Excessive heat.
<b>Incompatible materials</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	None under normal use.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Component identification

### Information on toxicological effects

ATEmix (oral)	10,081.00 mg/kg
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## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Unknown Aquatic Toxicity** 75.1 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

### Persistence and degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal Methods</b>	Dispose of waste product or used containers according to local regulations.
<b>Contaminated packaging</b>	Dispose of waste product or used containers according to local regulations.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Does not comply
<b>DSL/NDSL</b>	Does not comply
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	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

**SARA 311/312 Hazard Categories**

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

**CWA (Clean Water Act)**

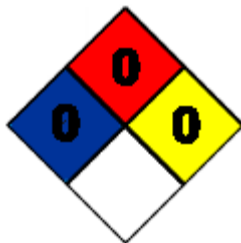
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**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

**US State Regulations****California Proposition 65****U.S. State Right-to-Know Regulations****CPSC (Consumer Product Safety Commission) - Specially Regulated Substances****16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health hazard</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and Chemical Hazards</b> N/A
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**Prepared by**

**Issuing Date**

**Reason for revision**

**Disclaimer**

Regulatory Affairs Department

Jun-01-2015

(M)SDS sections updated 9

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**

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product name** Coliform Tablet with MUG**Other means of identification****Product Code(s)** 4890**Recommended use of the chemical and restrictions on use****Recommended Use** Use as a laboratory reagent. Industrial (not for food or food contact use).**Details of the supplier of the safety data sheet**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****OSHA Regulatory Status**

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

**EMERGENCY OVERVIEW****Appearance** Tan **Physical state** Tablet ~0.1g (100mg) **Odor** Odorless**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Keep out of reach of children.

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Drink 1 or 2 glasses of water. Call a physician immediately.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

**3. COMPOSITION/INFORMATION ON INGREDIENTS\***

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

All ingredients may not be listed. Ingredients not listed do not meet the reporting requirements of the OSHA Hazard Communication Standard (HCS) as specified in 29 CFR 1910.1200.

#### 4. FIRST AID MEASURES

##### First Aid Measures

<b>General advice</b>	No hazards which require special first aid measures. Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids.
<b>Skin contact</b>	Wash off with warm water and soap.
<b>Inhalation</b>	Not expected to require first aid measures. Remove to fresh air.
<b>Ingestion</b>	Drink plenty of water.
<b><u>Self-protection of the first aider</u></b>	Use personal protective equipment. See section 8 for more information.

#### 5. FIREFIGHTING MEASURES

##### Suitable extinguishing media

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

##### Unsuitable extinguishing media

None.

##### Specific hazards arising from the chemical

None known.

##### 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

<b>Personal precautions</b>	See section 8.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.

##### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Dispose according to federal, state, and local regulations.
<b>Methods for cleaning up</b>	If local regulations permit, dissolve and rinse to drain with excess water. Sweep up and discard to trash. After cleaning, flush away traces with water.

#### 7. HANDLING AND STORAGE

##### Precautions for safe handling

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.
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##### Conditions for safe storage, including any incompatibilities

<b>Storage</b>	Keep tightly closed in a dry and cool place. Protect from moisture. Keep out of the reach of children.
<b>Incompatible Products</b>	No materials to be especially mentioned.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

### Appropriate engineering controls

<b>Engineering Measures</b>	Showers Eyewash stations Ventilation systems.
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### Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Protective gloves.
<b>Respiratory protection</b>	None required under normal usage.
<b>Hygiene Measures</b>	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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Tablet ~0.1g (100mg)	<b>Odor</b>	Odorless
<b>Appearance</b>	Tan		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	7	(1 tablet in 10mL of water)
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	Not Applicable	
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific gravity</b>	No information available	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

### Other Information

<b>Softening point</b>	No information available
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<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Exposure to air or moisture over prolonged periods. Excessive heat.
<b>Incompatible materials</b>	No materials to be especially mentioned.
<b>Hazardous decomposition products</b>	

## 11. TOXICOLOGICAL INFORMATION

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known or supplied information
<b><u>Information on likely routes of exposure</u></b>	
<b>Component identification</b>	
<b><u>Information on toxicological effects</u></b>	
<b>ATEmix (oral)</b>	9,549.00 mg/kg
<b>ATEmix (dermal)</b>	80,000.00 mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

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

**Bioaccumulation/Accumulation**  
No information available.

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal Methods</b>	Dispose of waste product or used containers according to local regulations.
<b>Contaminated packaging</b>	Dispose of waste product or used containers according to local regulations.

## 14. TRANSPORT INFORMATION

<b><u>DOT</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated
<b><u>IMDG/IMO</u></b>	Not regulated



## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Does not comply
<b>AICS</b>	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 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

#### SARA 311/312 Hazard Categories

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

#### CWA (Clean Water Act)

#### CERCLA

### US State Regulations

#### California Proposition 65

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

#### CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

## 16. OTHER INFORMATION

<b><u>NFPA</u></b>	<b>Health hazard</b> 0	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and Chemical Hazards</b> N/A
	<b>Health hazard</b> 0	<b>Flammability</b> 0	<b>Stability</b> 0	



Health Hazard	0
Fire Hazard	0
Reactivity	0

**Prepared by**

**Issuing Date**

**Reason for revision**

**Disclaimer**

Regulatory Affairs Department

Aug-06-2015

Update to Format

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**

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product name** Phosphorus Tablets**Other means of identification****Product Code(s)** 5422A**Recommended use of the chemical and restrictions on use****Recommended Use** Use as a laboratory reagent.**Details of the supplier of the safety data sheet**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**

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

**EMERGENCY OVERVIEW****Appearance** White **Physical state** Tablet **Odor** None**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection. Keep out of the reach of children.

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or physician.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Drink 1 or 2 glasses of water. Call a physician immediately.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

**Unknown Acute Toxicity**

4.46% of the mixture consists of ingredient(s) of unknown toxicity.

**3. COMPOSITION/INFORMATION ON INGREDIENTS\***

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical name	CAS No	Weight-%
Ammonium molybdate tetrahydrate	12054-85-2	2
Sodium bisulfate*	7681-38-1	10-15

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5034p, and may be disclosed only in a medical emergency

#### 4. FIRST AID MEASURES

##### First Aid Measures

<b>General advice</b>	No hazards which require special first aid measures. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Keep out of reach of children.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists or develops, contact a physician.
<b>Skin contact</b>	Wash off with soap and plenty of water removing all contaminated clothes and shoes. If irritation develops or persists, consult physician.
<b>Inhalation</b>	Remove to fresh air. Not an expected route of exposure.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Consult a physician.
<b><u>Self-protection of the first aider</u></b>	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.

#### 5. FIREFIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant 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

<b>Personal precautions</b>	Avoid contact with eyes, skin and clothing.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
<b><u>Methods and material for containment and cleaning up</u></b>	
<b>Methods for containment</b>	Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
<b>Methods for cleaning up</b>	Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.

#### 7. HANDLING AND STORAGE

##### Precautions for safe handling

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

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep container tightly closed in a dry and well-ventilated place. Keep away from heat. Protect from moisture. Keep out of the reach of children.

**Incompatible Products** Acids. Strong reducing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ammonium molybdate tetrahydrate 12054-85-2	TWA: 0.5 mg/m <sup>3</sup> Mo respirable fraction	TWA: 5 mg/m <sup>3</sup> Mo (vacated) TWA: 5 mg/m <sup>3</sup> Mo	IDLH: 1000 mg/m <sup>3</sup> Mo
Sodium bisulfate* 7681-38-1	-	-	Not Established

**Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Protective gloves.

**Hygiene Measures** Take off contaminated clothing and wash before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	Tablet	<b>Odor</b>	None
<b>Appearance</b>	White	<b>Odor threshold</b>	Not Applicable
<b>Color</b>	White		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	2	(1 tablet in 10mL of water)
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	Not Applicable -	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific gravity</b>	No information available	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	Soluble	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	Not Applicable	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	

**Explosive properties** Not Applicable  
**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 polymerization** Hazardous polymerization does not occur.  
**Conditions to avoid** Excessive heat. Moisture.  
**Incompatible materials** Acids. Strong reducing agents.  
**Hazardous decomposition products** None under normal use.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Component identification**

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	= 2490 mg/kg ( Rat )	Not Established	Not Established

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Ammonium molybdate tetrahydrate 12054-85-2	A3	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	Not Established	Not Established	Not Established

**ATEmix (oral)** 5,222.00 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	Not Established	190: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical name	Log Pow
Ammonium molybdate tetrahydrate 12054-85-2	Not Established
Sodium bisulfate*	Not Established

7681-38-1

**13. DISPOSAL CONSIDERATIONS****Disposal Methods** Dispose of waste product or used containers according to local regulations.**Contaminated packaging** Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	-	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Ammonium molybdate tetrahydrate 12054-85-2	-
Sodium bisulfate* 7681-38-1	-

**14. TRANSPORT INFORMATION****DOT** Not regulated**IATA** Not regulated**IMDG/IMO** Not regulated**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Does not comply
<b>PICCS</b>	Complies
<b>AICS</b>	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 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 %
Ammonium molybdate tetrahydrate 12054-85-2	1.0
Sodium bisulfate* 7681-38-1	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
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	Not Established	Not Established	Not 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
Ammonium molybdate tetrahydrate 12054-85-2	-	Not Established	-
Sodium bisulfate* 7681-38-1	-	Not Established	-

**US State Regulations****California Proposition 65**

Chemical name	California Proposition 65
Ammonium molybdate tetrahydrate 12054-85-2	Not Established
Sodium bisulfate* 7681-38-1	Not Established

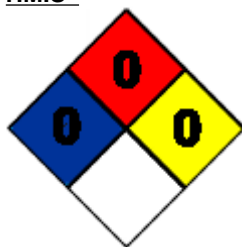
**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established
Sodium bisulfate* 7681-38-1	Not Established	Not Established	Not Established

**CPSC (Consumer Product Safety Commission) - Specially Regulated Substances****16. OTHER INFORMATION**



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



Health Hazard	<b>1</b>
Fire Hazard	<b>0</b>
Reactivity	<b>0</b>

**Issuing Date**

Jun-01-2015

**Reason for revision**

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

**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 Safety Data Sheet**

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product name** Wide Range pH Tablets**Other means of identification****Product Code(s)** 6459A**Recommended use of the chemical and restrictions on use****Recommended Use** Use as a laboratory reagent. Industrial (not for food or food contact use).**Details of the supplier of the safety data sheet**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****OSHA Regulatory Status**

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

**EMERGENCY OVERVIEW****Appearance** brown-gray **Physical state** Tablet **Odor** None**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Keep out of reach of children.

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Drink 1 or 2 glasses of water. Call a physician immediately.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

**3. COMPOSITION/INFORMATION ON INGREDIENTS\***

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5074p, and may be disclosed only in a medical emergency

#### 4. FIRST AID MEASURES

##### First Aid Measures

<b>General advice</b>	No hazards which require special first aid measures. Do not get in eyes, on skin, or on clothing. Keep out of reach of children.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists or develops, contact a physician.
<b>Skin contact</b>	Wash off with soap and plenty of water removing all contaminated clothes and shoes. If irritation develops or persists, consult physician.
<b>Inhalation</b>	Remove to fresh air. Not an expected route of exposure.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Consult a physician.
<b><u>Self-protection of the first aider</u></b>	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.

#### 5. FIREFIGHTING MEASURES

##### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant 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**

<b>Personal precautions</b>	Avoid contact with eyes, skin and clothing.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.

##### **Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
<b>Methods for cleaning up</b>	Sweep up and shovel into suitable containers for disposal. If local regulations permit, dissolve and rinse to drain with excess water. After cleaning, flush away traces with water.

#### 7. HANDLING AND STORAGE

##### **Precautions for safe handling**

<b>Handling</b>	Avoid contact with eyes, skin and clothing. Handle in accordance with good industrial hygiene and safety practice. Do not taste or swallow. Do not eat, drink, or smoke when using this product.
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**Conditions for safe storage, including any incompatibilities**

**Storage** Keep container tightly closed in a dry and well-ventilated place. Keep away from heat. Protect from moisture. Keep out of the reach of children.

**Incompatible Products** None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Protective gloves.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	Tablet	<b>Odor</b>	None
<b>Appearance</b>	brown-gray		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6	(1 tablet in 10mL of water)
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	Not Applicable	
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	No information available	
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**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available

**Bulk density** No information available

## 10. STABILITY AND REACTIVITY

**Stability** Stable.  
**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid** Excessive heat. Moisture.

**Incompatible materials** None known based on information supplied.

**Hazardous decomposition products** None under normal use.

## 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**

### Information on toxicological effects

**Carcinogenicity** Contains no ingredient listed as a carcinogen.

**Chronic toxicity** Product does not present a chronic toxicity hazard based on known or supplied information.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Unknown Aquatic Toxicity** 100 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

### Persistence and degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

## 13. DISPOSAL CONSIDERATIONS

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

**Contaminated packaging** Do not reuse empty containers.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	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

**SARA 311/312 Hazard Categories**

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

**CERCLA**

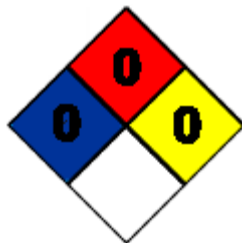
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements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

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****CPSC (Consumer Product Safety Commission) - Specially Regulated Substances****16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health hazard 0</b>	<b>Flammability 0</b>	<b>Instability 0</b>	<b>Physical and Chemical Hazards N/A</b>
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**Issuing Date** Jun-01-2015  
**Revision Date** Jan-11-2016  
**Reason for revision** (M)SDS sections updated 2

**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 Safety Data Sheet**

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product name** DPD #4R Tablet**Other means of identification****Product Code(s)** 6899A**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****EMERGENCY OVERVIEW****Hazard statements**

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Appearance** 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. Keep out of the reach of children.

**Response:** IF exposed or concerned: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Drink 1 or 2 glasses of water. Call a physician immediately.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/container to an approved waste disposal plant.

**3. COMPOSITION/INFORMATION ON INGREDIENTS\***

Chemical name	CAS #	Weight-%
Boric acid	10043-35-3	12



All ingredients may not be listed. Ingredients not listed do not meet the reporting requirements of the OSHA Hazard Communication Standard (HCS) as specified in 29 CFR 1910.1200.

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#80100291-5002p, and may be disclosed only in a medical emergency

#### 4. FIRST AID MEASURES

##### First Aid Measures

<b>General advice</b>	Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Consult a physician if necessary.
<b>Inhalation</b>	Not expected to require first aid measures. Remove to fresh air.
<b>Ingestion</b>	Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
<b><u>Self-protection of the first aider</u></b>	Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
<b>Notes to Physician</b>	May cause sensitization of susceptible persons. Treat symptomatically.

#### 5. FIREFIGHTING MEASURES

##### Suitable extinguishing media

Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), 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

<b>Personal precautions</b>	Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.

##### Methods and material for containment and cleaning up

<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	After cleaning, flush away traces with water.

#### 7. HANDLING AND STORAGE

##### Precautions for safe handling

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.
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**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
Boric acid 10043-35-3	STEL: 6 mg/m <sup>3</sup> inhalable fraction TWA: 2 mg/m <sup>3</sup> inhalable fraction	*-	Not Established

**Appropriate engineering controls**

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

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles). 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 eyes, skin 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****Information on basic physical and chemical properties**

<b>Physical state</b>	Solid Tablet	<b>Odor</b>	Odorless
<b>Appearance</b>	White		
<b>Color</b>	White		

<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
<b>pH</b>	6	(1 tablet in 10mL of water)
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	Not Applicable	
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific gravity</b>	No information available	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	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**

<b>Stability</b>	Stable.
<b>Hazardous Reactions</b>	Hazardous polymerization does not occur.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.
<b>Incompatible materials</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions -. Hydrogen iodide. Iodine.

**11. TOXICOLOGICAL INFORMATION****Product Information****Information on likely routes of exposure****Component identification**

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Boric acid 10043-35-3	= 2660 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 0.16 mg/L ( Rat ) 4 h

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Boric acid 10043-35-3	Not Established	Not Established	Not Established	Not Established

ATEmix (oral)	7,167.00 mg/kg
ATEmix (dermal)	6,477.00 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Boric acid 10043-35-3	Not Established	1020: 72 h Carassius auratus mg/L LC50 flow-through	115 - 153: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical name	Log Pow
Boric acid 10043-35-3	-0.757

**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
Boric acid 10043-35-3	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Boric acid 10043-35-3	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Boric acid 10043-35-3	*_

#### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

<b>TSCA</b>	Does not comply
<b>DSL/NDL</b>	Does not comply
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply

##### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - 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 %
Boric acid 10043-35-3	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
Boric acid 10043-35-3	Not Established	Not Established	Not Established	Not 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
Boric acid 10043-35-3	*-	Not Established	-

**US State Regulations**

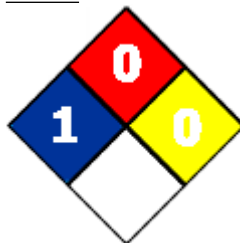
Chemical name	California Proposition 65
Boric acid 10043-35-3	Not Established

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Boric acid 10043-35-3	X	Not Established	Not Established

**CPSC (Consumer Product Safety Commission) - Specially Regulated Substances****16. OTHER INFORMATION**

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



Health Hazard	1
Fire Hazard	0
Reactivity	0

Prepared by  
Issuing Date

Regulatory Affairs Department  
Jun-01-2015

Revision Date

Feb-24-2016

Revision note Boric acid classification differs between the US and EU. It is not classified in the US but it is in the EU.

Reason for revision

SDS sections updated 2 3

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 Safety Data Sheet**

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

**Product identifier**

**Product name** Hardness T (HR) Tablet

**Other means of identification**

**Product Code(s)** 6917A

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Use as a laboratory reagent. Industrial (not for food or food contact use).

**Details of the supplier of the safety data sheet**

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

Serious eye damage/eye irritation

Category 2

### EMERGENCY OVERVIEW

**WARNING**

**Hazard statements**

Causes serious eye irritation.



**Appearance** Off-white

**Physical state** powder

**Odor** Odorless

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection.

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Drink 1 or 2 glasses of water. Call a physician immediately.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

**Other Hazards**

May be harmful if swallowed Harmful to aquatic life with long lasting effects

**Unknown Acute Toxicity**

3% of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Eriochrome black	1787-61-7	<1
Sodium borate	1330-43-4	4
Aromatic carboxylic acid salt	Proprietary	5
Carbonate salt	Proprietary	13

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#80100291-5002p, and may be disclosed only in a medical emergency  
Excipients not listed by name are non-hazardous and proprietary to the manufacturer

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>General advice</b>	Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Immediately flush eyes with gentle stream of water for at least 15 minutes, occasionally lifting upper and lower eyelids. If irritation persists or develops, contact a physician.
<b>Skin contact</b>	Wash off with warm water and soap. If irritation develops or persists, consult physician.
<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel.
<b>Ingestion</b>	Drink plenty of water. Clean mouth with water. If gastrointestinal distress occurs contact physician. Consult a physician.
<b><u>Self-protection of the first aider</u></b>	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.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), 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**

<b>Personal precautions</b>	See section 8. Avoid contact with the skin and the eyes.
<b>Environmental precautions</b>	No special environmental precautions required. See Section 12 for additional Ecological Information.



**Methods and material for containment and cleaning up**

**Methods for containment** Prevent dust cloud.

**Methods for cleaning up** Avoid dust formation. Sweep up and shovel into suitable containers for disposal.

**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 taste or swallow. 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 away from heat, moisture, and incompatibles. Keep out of the reach of children.

**Incompatible Products** None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Eriochrome black 1787-61-7	-	-	Not Established
Sodium borate 1330-43-4	6 mg/m <sup>3</sup> STEL (inhalable fraction, listed under Borate compounds, inorganic) 6 mg/m <sup>3</sup> STEL (inhalable fraction) TWA: 2 mg/m <sup>3</sup>	-	TWA: 1 mg/m <sup>3</sup>
Aromatic carboxylic acid salt	-	-	Not Established
Carbonate salt	-	-	Not Established

**Appropriate engineering controls**

**Engineering Measures** None under normal use conditions.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**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 eyes, skin 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****Information on basic physical and chemical properties**

**Physical state** powder  
**Appearance** Off-white  
**Odor** Odorless

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	11	(1 tablet in 10mL of water)
Melting point / freezing point	No information available	

<b>Boiling point / boiling range</b>	No information available
<b>Flash point</b>	No information available
<b>Evaporation rate</b>	
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Exposure to air or moisture over prolonged periods. Temperature extremes.
<b>Incompatible materials</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	None under normal use.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Eriochrome black 1787-61-7	= 17590 mg/kg ( Rat )	> 3000 mg/kg ( Rabbit )	> 2 mg/L ( Rat ) 4 h
Sodium borate 1330-43-4	= 2660 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	Not Established
Aromatic carboxylic acid salt	= 2100 mg/kg ( Rat )	Not Established	Not Established
Carbonate salt	= 4090 mg/kg ( Rat )	Not Established	= 2300 mg/m <sup>3</sup> ( Rat ) 2 h

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Eriochrome black 1787-61-7	Not Established	Not Established	Not Established	Not Established
Sodium borate 1330-43-4	Not Established	Not Established	Not Established	Not Established
Aromatic carboxylic acid salt	Not Established	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established	Not Established

**Chronic toxicity** None known.

ATEmix (oral) 3461  
ATEmix (dermal) 54054 mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Eriochrome black 1787-61-7	0.094: 72 h Desmodesmus subspicatus mg/L EC50	12.3: 96 h Brachydanio rerio mg/L LC50 static 6: 96 h Pimephales promelas mg/L LC50 static 7.3: 96 h Oncorhynchus mykiss mg/L LC50 static	41.3: 48 h Daphnia magna mg/L EC50
Sodium borate 1330-43-4	2.6 - 21.8: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 158: 96 h Desmodesmus subspicatus mg/L EC50	340: 96 h Limanda limanda mg/L LC50	1085 - 1402: 48 h Daphnia magna mg/L LC50
Aromatic carboxylic acid salt	Not Established	420 - 558: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	650: 48 h Daphnia magna mg/L EC50
Carbonate salt	242: 120 h Nitzschia mg/L EC50	310 - 1220: 96 h Pimephales promelas mg/L LC50 static 300: 96 h Lepomis macrochirus mg/L LC50 static	265: 48 h Daphnia magna mg/L EC50

### Persistence and degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Eriochrome black 1787-61-7	Not Established
Sodium borate 1330-43-4	Not Established
Aromatic carboxylic acid salt	-2.13
Carbonate salt	Not Established

## 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
Eriochrome black 1787-61-7	Not Established	-	Not Established	Not Established
Sodium borate 1330-43-4	Not Established	-	Not Established	Not Established
Aromatic carboxylic acid salt	Not Established	-	Not Established	Not Established
Carbonate salt	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Eriochrome black 1787-61-7	Not Established	Not Established	Not Established	Not Established
Sodium borate 1330-43-4	Not Established	Not Established	Not Established	Not Established
Aromatic carboxylic acid salt	Not Established	Not Established	Not Established	Not Established

Carbonate salt	Not Established	Not Established	Not Established	Not Established
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Chemical name	California Hazardous Waste Status
Eriochrome black 1787-61-7	-
Sodium borate 1330-43-4	-
Aromatic carboxylic acid salt	-
Carbonate salt	-

#### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Does not comply
<b>PICCS</b>	Complies
<b>AICS</b>	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 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 %
Eriochrome black 1787-61-7	Not Established
Sodium borate 1330-43-4	Not Established
Aromatic carboxylic acid salt	Not Established
Carbonate salt	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
Eriochrome black 1787-61-7	Not Established	Not Established	Not Established	Not Established
Sodium borate 1330-43-4	Not Established	Not Established	Not Established	Not Established
Aromatic carboxylic acid salt	Not Established	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established	Not 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
Eriochrome black 1787-61-7	-	Not Established	-
Sodium borate 1330-43-4	-	Not Established	-
Aromatic carboxylic acid salt	-	Not Established	-
Carbonate salt	-	Not Established	-

**US State Regulations****California Proposition 65**

Chemical name	California Proposition 65
Eriochrome black 1787-61-7	Not Established
Sodium borate 1330-43-4	Not Established
Aromatic carboxylic acid salt	Not Established
Carbonate salt	Not Established

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Eriochrome black 1787-61-7	Not Established	Not Established	Not Established
Sodium borate 1330-43-4	Not Established	X	X
Aromatic carboxylic acid salt	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established

**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

Health hazard 1

Flammability 0

Stability 0



Health Hazard	1
Fire Hazard	0
Reactivity	0

Prepared by

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Disclaimer

Regulatory Affairs Department

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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**