

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

**Product identifier**

**Product name** NITROGEN INDICATING POWDER

**Other means of identification**

**Product Code(s)** 5703

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

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

**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 - Inhalation (Dusts/Mists)	Category 4
Specific target organ toxicity (repeated exposure)	Category 2

### EMERGENCY OVERVIEW

**WARNING**

**Hazard statements**

Harmful if swallowed. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure.



**Appearance** Off-white

**Physical state** powder

**Odor** Odorless

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray.

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell.

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

Call a POISON CENTER or doctor/physician if you feel unwell

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

Very toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Zinc; Zinc Dust	7440-66-6	<1
Manganese sulfate monohydrate	10034-96-5	1-5
Sucrose	57-50-1	25-35
Barium sulfate	7727-43-7	60-70

### 4. FIRST AID MEASURES

#### First Aid Measures

##### General advice

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

##### Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

##### Skin contact

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.

##### Inhalation

Remove to fresh air.

##### Ingestion

Never give anything by mouth to an unconscious person. Drink plenty of water. Consult a physician if necessary.

##### Self-protection of the first aider

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

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

#### Sensitivity to Static Discharge

Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard

#### 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>	Ensure adequate ventilation. 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 cleaning up</b>	Avoid dust formation. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.
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**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 away from heat. Keep out of the reach of children.
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<b>Incompatible Products</b>	Strong acids. Strong oxidizing agents.
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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc; Zinc Dust 7440-66-6	-	-	Not Established
Manganese sulfate monohydrate 10034-96-5	TWA: 0.02 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>	Ceiling: 5 mg/m <sup>3</sup>	IDLH: 500 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Sucrose 57-50-1	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
Barium sulfate 7727-43-7	TWA: 5 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>

**Appropriate engineering controls**

<b>Engineering Measures</b>	Showers. Eyewash stations. Ensure adequate ventilation, especially in confined areas.
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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>	Gloves & Lab Coat.
<b>Respiratory protection</b>	None required under normal usage. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
<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**

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

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>		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>	Partly soluble	
<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 recommended storage conditions.  
**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid** Heat, flames and sparks. Exposure to air or moisture over prolonged periods.  
**Incompatible materials** Strong acids. Strong oxidizing agents.  
**Hazardous decomposition products** Thermal decomposition can lead to release of toxic/corrosive gases and vapors. Sulfur oxides (SOx). Barium oxides. Carbon oxides (COx).

## 11. TOXICOLOGICAL INFORMATION

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

<b>Chemical name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Zinc; Zinc Dust 7440-66-6	Not Established	Not Established	Not Established
Manganese sulfate monohydrate 10034-96-5	= 782 mg/kg ( Rat )	Not Established	Not Established
Sucrose 57-50-1	= 29700 mg/kg ( Rat )	Not Established	Not Established
Barium sulfate 7727-43-7	Not Established	Not Established	Not Established

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Zinc; Zinc Dust 7440-66-6	Not Established	Not Established	Not Established	Not Established
Manganese sulfate monohydrate 10034-96-5	Not Established	Not Established	Not Established	Not Established
Sucrose 57-50-1	Not Established	Not Established	Not Established	Not Established
Barium sulfate 7727-43-7	Not Established	Not Established	Not Established	Not Established

**Chronic toxicity** No known effect. None known.

ATEmix (oral) 737  
ATEmix (inhalation-dust/mist) 2.3 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Unknown Aquatic Toxicity** 98.02 % 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
Manganese sulfate monohydrate 10034-96-5	Not Established	Not Established	Not Established
Sucrose 57-50-1	Not Established	Not Established	Not Established
Barium sulfate 7727-43-7	Not Established	Not Established	Not Established

### Persistence and degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Zinc; Zinc Dust 7440-66-6	Not Established
Manganese sulfate monohydrate 10034-96-5	Not Established
Sucrose 57-50-1	Not Established
Barium sulfate 7727-43-7	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
Zinc; Zinc Dust 7440-66-6	Not Established	-	Not Established	Not Established
Manganese sulfate monohydrate 10034-96-5	Not Established	-	Not Established	Not Established
Sucrose 57-50-1	Not Established	-	Not Established	Not Established
Barium sulfate 7727-43-7	(hazardous constituent - no waste number)	-	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
Manganese sulfate monohydrate 10034-96-5	Not Established	Not Established	Not Established	Not Established
Sucrose 57-50-1	Not Established	Not Established	Not Established	Not Established
Barium sulfate 7727-43-7	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Zinc; Zinc Dust 7440-66-6	-
Manganese sulfate monohydrate 10034-96-5	-
Sucrose 57-50-1	-
Barium sulfate 7727-43-7	-

#### 14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

TSCA	Complies
DSL/NDSL	Does not comply
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/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
Manganese sulfate monohydrate 10034-96-5	1.0
Sucrose 57-50-1	Not Established
Barium sulfate 7727-43-7	1.0

#### **SARA 311/312 Hazard Categories**

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

#### **CWA (Clean Water Act)**

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
Manganese sulfate monohydrate 10034-96-5	Not Established	Not Established	Not Established	Not Established
Sucrose 57-50-1	Not Established	Not Established	Not Established	Not Established
Barium sulfate 7727-43-7	Not Established	Not Established	Not Established	Not Established

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

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
Manganese sulfate monohydrate 10034-96-5	-	Not Established	-
Sucrose 57-50-1	-	Not Established	-
Barium sulfate 7727-43-7	-	Not Established	-

### US State Regulations

#### **California Proposition 65**

Chemical name	California Proposition 65
Zinc; Zinc Dust 7440-66-6	Not Established
Manganese sulfate monohydrate 10034-96-5	Not Established

Sucrose 57-50-1	Not Established
Barium sulfate 7727-43-7	Not Established

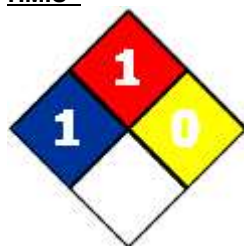
**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Zinc; Zinc Dust 7440-66-6	X	X	X
Manganese sulfate monohydrate 10034-96-5	X	Not Established	X
Sucrose 57-50-1	Not Established	X	X
Barium sulfate 7727-43-7	X	X	X

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

**16. OTHER INFORMATION**

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



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

**Prepared by** Regulatory Affairs Department  
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**Disclaimer**

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

**End of Material Safety Data Sheet**