

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

Product identifier

Product name Ammonia #2 Tablets

Other means of identification

Product Code(s) 3969A

UN-No 3262

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

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

EMERGENCY OVERVIEW

DANGER

Hazard statements

Harmful if swallowed. Causes severe skin burns and eye damage.



Appearance light pink with white specks **Physical state** Tablet ~0.1g (100mg) **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. Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. 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.
IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF SWALLOWED. Do NOT induce vomiting.

Precautionary Statements - Storage

Store locked up.

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

4% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS*

| Chemical name | CAS No | Weight-% |
|-------------------|-----------|----------|
| Lithium hydroxide | 1310-65-2 | 10 |
| Sodium carbonate* | 497-19-8 | 10-15 |

Excipients not listed by name are non-hazardous and proprietary to the manufacturer
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#80100291-5033p, and may be disclosed only in a medical emergency

4. FIRST AID MEASURES

First Aid Measures

| | |
|--|---|
| General advice | Do not get in eyes, on skin, or on clothing. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. |
| Skin contact | Wash off with warm water and soap. If symptoms persist, call a physician. |
| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. |
| Ingestion | Drink plenty of water. Consult a physician if necessary. |
| <u>Self-protection of the first aider</u> | Use personal protection recommended in Section 8. 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 (CO₂), 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 Use personal protection recommended in Section 8.

Environmental precautions No special environmental precautions required. 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.

Methods for cleaning up Containerize spill material and hold for later disposal. If local regulations permit, dissolve with large volume of water, neutralize with dilute acid (acetic, hydrochloric), then rinse to drain with excess water. 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. Keep away from direct sunlight. Keep away from heat, moisture, and incompatibles. Keep out of the reach of children.

Incompatible Products Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------------|-----------|----------|-----------------|
| Lithium hydroxide 1310-65-2 | - | - | Not Established |
| Sodium carbonate* 497-19-8 | - | - | Not Established |

Appropriate engineering controls

Engineering Measures None under normal use conditions. For home use.

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. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Tablet ~0.1g (100mg)
Appearance light pink with white specks **Odor** Odorless

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------|--------------------------|-------------------------|
| pH | 13 | |
| 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 | |
| Autoignition temperature | No information available | |
| Decomposition temperature | No information available | |
| Kinematic viscosity | No information available | |
| Dynamic viscosity | No information available | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |

Other Information

| | |
|------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Density | No information available |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Stability | Stable under recommended storage conditions. |
| Hazardous polymerization | Hazardous polymerization does not occur. |
| Conditions to avoid | Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight. |
| Incompatible materials | Strong acids. |
| Hazardous decomposition products | None under normal use. |

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| | |
|---------------------|------------------------------------|
| Inhalation | Not an expected route of exposure. |
| Eye contact | May cause irritation. |
| Skin contact | May cause irritation. |
| Ingestion | May be harmful if swallowed. |

Component identification

| Chemical name | ATEmix (oral) | ATEmix (dermal) | Inhalation LC50 |
|--------------------------------|----------------------|------------------------|--------------------------------------|
| Lithium hydroxide 1310-65-2 | = 210 mg/kg (Rat) | Not Established | = 960 mg/m ³ (Rat) 4 h |
| Sodium carbonate* 497-19-8 | = 4090 mg/kg (Rat) | Not Established | = 2300 mg/m ³ (Rat) 2 h |

Information on toxicological effects

| Chemical name | ACGIH | IARC | NTP | OSHA |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|
| Lithium hydroxide 1310-65-2 | Not Established | Not Established | Not Established | Not Established |
| Sodium carbonate* | Not Established | Not Established | Not Established | Not Established |

| | | | |
|-------------------------|----------------|--|--|
| 497-19-8 | | | |
| Chronic toxicity | None known. | | |
| ATEmix (oral) | 1,385.00 mg/kg | | |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 40 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical name | Toxicity to Algae | Toxicity to Fish | Daphnia Magna (Water Flea) |
|--------------------------------|--------------------------------|--|-----------------------------------|
| Lithium hydroxide 1310-65-2 | Not Established | Not Established | Not Established |
| Sodium carbonate* 497-19-8 | 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 |
|--------------------------------|-----------------|
| Lithium hydroxide 1310-65-2 | Not Established |
| Sodium carbonate* 497-19-8 | 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 |
|--------------------------------|-----------------|--------------------------|------------------------|------------------------|
| Lithium hydroxide 1310-65-2 | Not Established | - | Not Established | Not Established |
| Sodium carbonate* 497-19-8 | Not Established | - | Not Established | Not Established |

| Chemical name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|--------------------------------|--------------------------------------|------------------------|------------------------|------------------------|
| Lithium hydroxide 1310-65-2 | Not Established | Not Established | Not Established | Not Established |
| Sodium carbonate* 497-19-8 | Not Established | Not Established | Not Established | Not Established |

| Chemical name | California Hazardous Waste Status |
|--------------------------------|-----------------------------------|
| Lithium hydroxide 1310-65-2 | - |
| Sodium carbonate* 497-19-8 | Corrosive |

14. TRANSPORT INFORMATION

DOT

UN-No 3262
Proper shipping name CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (<10% Lithium Hydroxide mixture)
Hazard Class 8
Packing group II

IATA

UN-No 3262
 Proper shipping name CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (<10% Lithium Hydroxide mixture)
 Hazard Class 8
 Packing group II

IMDG/IMO

UN-No 3262
 Proper shipping name CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (<10% Lithium Hydroxide mixture)
 Hazard Class 8
 Packing group II

| |
|-----------------------------------|
| 15. REGULATORY INFORMATION |
|-----------------------------------|

International Inventories

TSCA Complies
 DSL/NDSL Does not comply
 EINECS/ELINCS Does not comply
 ENCS Does not comply
 IECS 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
 IECS - 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 % |
|--------------------------------|-------------------------------|
| Lithium hydroxide 1310-65-2 | Not Established |
| Sodium carbonate* 497-19-8 | 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 |
|-------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Lithium hydroxide | Not Established | Not Established | Not Established | Not Established |

| | | | | |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|
| 1310-65-2 | | | | |
| Sodium carbonate* 497-19-8 | 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 |
|--------------------------------|--------------------------|-----------------|----|
| Lithium hydroxide 1310-65-2 | - | Not Established | - |
| Sodium carbonate* 497-19-8 | - | Not Established | - |

US State Regulations**California Proposition 65**

| Chemical name | California Proposition 65 |
|--------------------------------|---------------------------|
| Lithium hydroxide 1310-65-2 | Not Established |
| Sodium carbonate* 497-19-8 | Not Established |

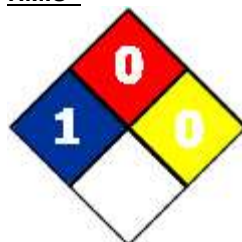
U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|-----------------|-----------------|-----------------|
| Lithium hydroxide 1310-65-2 | Not Established | Not Established | Not Established |
| Sodium carbonate* 497-19-8 | 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

HMIS Health hazard 2 Flammability 0 Stability 0



| | |
|---------------|---|
| Health Hazard | 2 |
| Fire Hazard | 0 |
| Reactivity | 0 |

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Disclaimer

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

End of Safety Data Sheet