

Safety Data Sheet

OSHA format Revision Number 0

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

| Product identifier Product name | SULFATE TURBIDITY TABLET |
|--|---|
| Other means of identification Product Code(s) | 6456 |
| UN-No | 1564 |
| Recommended use of the chemica | I and restrictions on use_ |
| Recommended Use | Use as a laboratory reagent. Laboratory chemicals. Industrial (not for food or food contact use). |
| Details of the supplier of the safety | <u>/ data sheet</u> |
| | 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

| Acute toxicity - Oral | Category 4 |
|-----------------------------------|------------|
| Acute toxicity - Dermal | Category 4 |
| Serious eye damage/eye irritation | Category 2 |

EMERGENCY OVERVIEW

WARNING

Hazard statements

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



Physical state Solid Tablet

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. 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. If eye irritation persists: Get medical advice/attention.

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.

Storage:

Store in a well-ventilated place. Keep cool.

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-% |
|--------------------|------------|----------|
| Barium chloride | 10361-37-2 | <5.5 |
| Adipic acid | 124-04-9 | 10-30 |
| Potassium chloride | 7447-40-7 | 60-80 |

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 | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician. | | |
| Ingestion | Induce vomiting, but only if victim is fully conscious. Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary. | | |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protection recommended in Section 8. | | |
| Notes to Physician | Treat symptomatically. | | |
| 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 | | | | |
|---|---|--|--|--|
| Personal precautions | Use personal protection recommended in Section 8. | | | |
| Environmental precautions | See Section 12 for additional Ecological Information. | | | |
| Methods and material for containment and cleaning up | | | | |
| Methods for containment | Prevent dust cloud. Sweep up in a manner that does not dispurse dust and shovel into suitable containers for disposal. Dispose according to local regulations, if permitted dissolve in water and rinse to drain. | | | |
| Methods for cleaning up | Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water. | | | |
| | | | | |

7. HANDLING AND STORAGE

Precautions for safe handling

| Handling | Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid breathing dust. | | |
|---|--|--|--|
| Conditions for safe storage, including any incompatibilities | | | |
| Storage: | Keep containers tightly closed in a dry, cool and well-ventilated place. | | |
| Incompatible Products None known based on information supplied. | | | |
| | | | |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|--------------------------------|---|--|
| Barium chloride | TWA: 0.5 mg/m ³ Ba | TWA: 0.5 mg/m ³ Ba | IDLH: 50 mg/m ³ Ba |
| 10361-37-2 | TWA: 0.5 mg/m Ba | (vacated) TWA: 0.5 mg/m ³ Ba | TWA: 0.5 mg/m ³ Ba TWA: 0.5 |
| 10301 37 2 | | (vacated) TVA. 0.5 mg/m Ba | mg/m ³ except Barium sulfate Ba |
| Adipic acid | TWA: 5 mg/m ³ | *_ | Not Established |
| 124-04-9 | i wix. o mg/m | | Hot Established |
| Potassium chloride | *_ | *_ | Not Established |
| 7447-40-7 | | | |
| Appropriate engineering controls | <u> </u> | • | |
| | | | |
| Engineering Measures | Showers | | |
| | Eyewash stations | | |
| | Ventilation systems. | | |
| | | | |
| Individual protection measures, s | such as personal protective eq | <u>uipment</u> | |
| Eye/Face Protection | Wear safety glasses with sid | e shields (or goggles). | |
| | | | |
| Skin and body protection | Gloves & Lab Coat. Impervio | ous clothing. Protective gloves. N | litrile rubber. |
| Hygiene Measures | Handle in accordance with g | ood industrial hygiene and safety | y practice. |
| | 9. PHYSICAL AND CHE | | |
| | | | |
| Information on basic physical an | d chemical properties | | |
| Physical state | Solid Tablet | | |
| Appearance | White | Odor | Odorless |
| Appearance | Winte | Cubi | Oddness |
| Property | | Remarks • | |
| <u>Property</u> | | <u>Remarks</u> | |
| | | | |
| n U | | | |
| pH Molting point (freezing point | No information available | | |
| Melting point / freezing point 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 | | |
| | No information available | | |
| Oxidizing properties | NO INIOIMALION AVAIIADIE | | |
| 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 | | |
| Built defisity | | | |

10. STABILITY AND REACTIVITY

| Stability Hazardous polymerization | Stable under recommended storage conditions. Hazardous polymerization does not occur. |
|---------------------------------------|--|
| Conditions to avoid | Extremes of temperature and direct sunlight. |
| Incompatible materials | None known based on information supplied. |

Hazardous decomposition products

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component identification

| Chemical name | ATEmix (oral) | ATEmix (dermal) | Inhalation LC50 |
|--------------------|----------------------------|----------------------|--------------------|
| Barium chloride | = 118 mg/kg (Rat) | Not Established | Not Established |
| 10361-37-2 | | | |
| Adipic acid | > 11000 mg/kg (Rat) = 2210 | > 200 mg/kg (Rabbit) | > 31 mg/L (Rat)1 h |
| 124-04-9 | mg/kg (Rat) | | |
| Potassium chloride | = 2600 mg/kg (Rat) | Not Established | Not Established |
| 7447-40-7 | | | |

Information on toxicological effects

| Chemical name | ACGIH | IARC | NTP | OSHA |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
| Barium chloride 10361-37-2 | Not Established | Not Established | Not Established | Not Established |
| Adipic acid 124-04-9 | Not Established | Not Established | Not Established | Not Established |
| Potassium chloride 7447-40-7 | Not Established | Not Established | Not Established | Not Established |

| ATEmix (oral) | 1,416.00 mg/kg |
|-------------------------------|----------------|
| ATEmix (dermal) | 1,510.00 mg/kg |
| ATEmix (inhalation-dust/mist) | 37.50 mg/l |

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical name | Toxicity to Algae | Toxicity to Fish | Daphnia Magna (Water Flea) |
|--------------------|--------------------------------|---------------------------------|-------------------------------|
| Barium chloride | Not Established | Not Established | 14.5: 48 h Daphnia magna mg/L |
| 10361-37-2 | | | EC50 |
| Adipic acid | 26.6: 96 h Desmodesmus | 150 - 220: 96 h Leuciscus idus | 85.7: 48 h Daphnia magna mg/L |
| 124-04-9 | subspicatus mg/L EC50 31.3: 72 | mg/L LC50 static 230: 96 h | EC50 88.4: 48 h Daphnia magna |
| | h Desmodesmus subspicatus | Leuciscus idus mg/L LC50 static | mg/L EC50 |
| | mg/L EC50 35: 96 h | 97: 96 h Pimephales promelas | |
| | Desmodesmus subspicatus mg/L | mg/L LC50 static | |
| | EC50 66: 72 h Desmodesmus | | |
| | subspicatus mg/L EC50 | | |
| Potassium chloride | 2500: 72 h Desmodesmus | 750 - 1020: 96 h Pimephales | 825: 48 h Daphnia magna mg/L |
| 7447-40-7 | subspicatus mg/L EC50 | promelas mg/L LC50 static 1060: | EC50 83: 48 h Daphnia magna |
| | | 96 h Lepomis macrochirus mg/L | mg/L EC50 Static |
| | | LC50 static | |

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Mobility

Will likely be mobile in the environment due to its water solubility.

| Chemical name | Log Pow |
|---------------------------------|----------------------|
| Barium chloride 10361-37-2 | Not Established |
| Adipic acid 124-04-9 | 0.081 -0.575 - 0.081 |
| Potassium chloride 7447-40-7 | Not Established |

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 |
|--------------------|-----------------|--------------------------|------------------------|------------------------|
| Barium chloride | Not Established | - | Not Established | Not Established |
| 10361-37-2 | | | | |
| Adipic acid | Not Established | - | Not Established | Not Established |
| 124-04-9 | | | | |
| Potassium chloride | Not Established | - | Not Established | Not Established |
| 7447-40-7 | | | | |

| Chemical name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|---------------------------------|---|------------------------|------------------------|------------------------|
| Barium chloride 10361-37-2 | Not Established | Not Established | Not Established | Not Established |
| Adipic acid 124-04-9 | Not Established | Not Established | Not Established | Not Established |
| Potassium chloride 7447-40-7 | Not Established | Not Established | Not Established | Not Established |

| Chemical name | California Hazardous Waste Status |
|--------------------|-----------------------------------|
| Barium chloride | Toxic |
| 10361-37-2 | |
| Adipic acid | *- |
| 124-04-9 | |
| Potassium chloride | *- |
| 7447-40-7 | |

14. TRANSPORT INFORMATION

DOT

| UN-No | 1564 |
|----------------------|---|
| Proper shipping name | BARIUM COMPOUNDS N.O.S. (Barium Chloride) |
| Hazard Class | 6.1 |
| Packing group | III |

<u>IATA</u>

| UN-No Proper shipping name | 1564 BARIUM COMPOUNDS, N.O.S. (Barium Chloride) |
|-------------------------------|--|
| Hazard Class | 6.1 |
| Packing group | III |

IMDG/IMO

| UN-No | 1 |
|----------------------|----|
| Proper shipping name | В |
| Hazard Class | 6. |
| Packing group | II |

1564 3ARIUM COMPOUNDS, N.O.S. (Barium Chloride) 3.1 III

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 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 % |
|-----------------------------------|-------------------------------|
| Barium chloride 10361-37-2 | 1.0 |
| Adipic acid 124-04-9 | Not Established |
| Potassium chloride 7447-40-7 | Not Established |
| SARA 311/312 Hazard Categories | |
| Acute health hazard | No |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product contains the following substances which are regulated 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 |
|---------------------------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| Barium chloride 10361-37-2 | Not Established | Not Established | Not Established | Not Established |
| Adipic acid 124-04-9 | 5000 lb | Not Established | Not Established | Х |
| Potassium chloride 7447-40-7 | 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 |
|----------------------------------|---------------|--------------------------|-----------------|---------------------|
| Barium chloride *- 10361-37-2 | | Not Established | - | |
| ĺ | Adipic acid | 5000 lb | Not Established | RQ 5000 lb final RQ |

| 124-04-9 | | | RQ 2270 kg final RQ |
|--------------------|----|-----------------|---------------------|
| Potassium chloride | *_ | Not Established | - |
| 7447-40-7 | | | |

US State Regulations

| Chemical name | California Proposition 65 | |
|---------------------------------|---------------------------|--|
| Barium chloride 10361-37-2 | Not Established | |
| Adipic acid 124-04-9 | Not Established | |
| Potassium chloride 7447-40-7 | Not Established | |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------|-----------------|-----------------|-----------------|
| Barium chloride 10361-37-2 | X | Not Established | Х |
| Adipic acid 124-04-9 | X | X | Х |
| Potassium chloride 7447-40-7 | Not Established | Not Established | Not Established |

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

| 16. OTHER INFORMATION | | | | | | |
|--|-----------------|----------------|---------------|--------------------------------------|--|--|
| <u>NFPA</u> | 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 | | | | | |
| Issuing Date Reason for revision <u>Disclaimer</u> | | ons updated 14 | | | | |

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