Section 1. Product and Company Identification

Product Name: N-Acetyl-L-Cysteine
Product ID: A0918
Chemical Name (Synonyms): Acetylcysteine; Brunac; Fabrol; Fluimucil; Fluprowit; Mucosil
Supplier: LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com
Emergency Phone #: 1-800-424-9300

Section 2. Hazards Identification

GHS Classification: Not a hazardous substance or mixture.

GHS Label elements including precautionary statements

Pictogram

Signal word

Hazard and precautionary statements

Hazard statement: Not a hazardous substance or mixture.
Precautionary statement: Not a hazardous substance or mixture.

HMIS Classification

Health hazard: 0
Chronic health hazard: 0
Flammability: 0
Physical hazard: 0

NFPA Rating

Health hazard: 0
Fire hazards: 0
Reactivity hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May causes eye irritation.
Section 3. Composition/Information on Ingredients

Substances
- **Formula**: C_5_1_9_N_3_O_3_S
- **CAS No.**: 616-91-1
- **Formula Wt.**: 163.20
- **EC No.**: 210-498-3

Section 4. First Aid Measures

General advice
- **Eye Contact**: Flush eyes with water as a precaution.
- **Skin Contact**: Wash off with soap and plenty of water.
- **Inhalation**: If breathed in, move person into fresh air. If not breathing, give artificial respiration.
- **Ingestion**: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5. Firefighting Measures

- **Flash Point**: Not available.
- **Extinguishing Media**: Use water spray, alcohol-resistant foam, dry chemical powder, carbon dioxide.
- **Firefighting Procedures**: Wear self-contained breathing apparatus for fire fighting and protective clothing if necessary.
- **Unusual Fire Hazards**: Carbon oxides, nitrogen oxides (NOx), sulfur oxides.

Section 6. Accidental Release Measures

- **Personal Precautions**: Avoid dust formation. Avoid breathing vapors, mist, or gas.
- **Environmental Precautions**: Do not let product enter drains.
- **Methods and materials for containment and cleanup**: Avoid raising dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

- **Handling**: Wear gloves, goggles, and lab coat when handling this material. Use appropriate exhaust ventilation at places where dust is formed.
- **Storage Conditions**: Store in a cool, dry and well-ventilated place in a tightly closed container.
- **Hazardous Decomposition Products**: Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides.
- **Other Remarks**: None.

Ingestion: May be harmful if swallowed.
### Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**
- **EXPOSURE CONTROLS**: Contains no substances with occupational exposure limit values.
- **General industrial hygiene practice**.
- **PERSONAL PROTECTION**
  - **Eye/face protection**: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
  - **Skin protection**: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full or Splash contact: Nitrile rubber - Minimum layer thickness 0.11, break through time 480 min., Material tested: Dermatril ® (KCL 740 / Aldrich Z677272, Size M).
  - **Body protection**: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
  - **Respiratory protection**: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
<th>Boiling Point</th>
<th>Volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>White powder</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not available</td>
<td>106°C-109.5°C</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
<td>Not available</td>
<td>pH Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not available</td>
<td></td>
<td>Ignition temperature Not available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Not available</td>
<td>Autoignition temperature Not available</td>
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</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not available</td>
<td>Vapor pressure Not available</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Soluble in water</td>
<td>Odor Not available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available</td>
<td>Odor Threshold Not available</td>
<td></td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>Not available</td>
<td>Evaporation rate Not available</td>
<td></td>
</tr>
</tbody>
</table>

### Section 10. Stability and Reactivity

**Stability**
- Stable under recommended storage conditions.

**Materials To Avoid**
- Keep away from heat, strong oxidizing agents, heavy metals, heavy metal salts, rubber, and oxygen.

**Hazardous Decomposition Products**
- Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides.
Section 11. Toxicological Information

**Oral LD50**
- Rat: 5,050 mg/kg
- Mouse: 4,400 mg/kg

**Inhalation LC50**
- Not available.

**Dermal LD50**
- Not available.

**Other information on acute toxicity**
- Not available.

**Skin corrosion/irritation**
- Not available.

**Serious eye damage/irritation**
- Not available.

**Respiratory or skin sensitization**
- Not available.

**Germ cell mutagenicity**
- Not available.

**Reproductive Toxicity**
- Not available.

**Aspiration Hazard**
- Not available.

**Synergistic effects**
- Not available.

**Specific organ toxicity**

- **Single exposure (GHS)**
  - Not available.

- **Repeated exposure (GHS)**
  - Not available.

**Additional Information**
- RTECS: HA1660000

**Signs and symptoms of exposure**
- Bronchospasm, nausea, vomiting, stomatitis and nasal discharge

**Potential Health Effects**
- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Skin: May be harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.
- Ingestion: May be harmful if swallowed.

**Carcinogenicity**
- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Section 12. Ecological Information

**Toxicity**
- Not available.

**Mobility in soil**
- Not available.

**PBT and vPvB assessment**
- PBT/vPvB assessment not available as chemical safety assessment not required/not
Waste Disposal

Dispose of material according to all federal, state, and local regulations.
Offer material to a licensed, professional waste disposal company to dispose of as unused product.

Persistence and degradability  Not available.

Bioaccumulative potential  Not available.

Other adverse effects  Not available.

Section 13. Disposal Considerations

Waste Disposal

Dispose of material according to all federal, state, and local regulations.
Offer material to a licensed, professional waste disposal company to dispose of as unused product.

Section 14. Transport Information

DOT (US)  Not dangerous goods.

IATA  Not dangerous goods.

IMDG  Not dangerous goods.

Further Information

Section 15. Regulatory Information

Reach No.

SARA 302 Components  No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components  This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Components  No SARA hazards.

Massachusetts Right To Know Components  No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components  N-Acetyl-L-Cysteine  CAS No. 606-91-1  Revision Date

New Jersey Right To Know Components  N-Acetyl-L-Cysteine  CAS No. 606-91-1  Revision Date

California Prop 65 Components  This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

Other information  The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.