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

Product Name: Loviscol Products
Common Name: Carbocisteine
Chemical Name: Not applicable
Synonyms: Loviscol Drops, Loviscol Syrup, Carbocisteine
Product Use: Pharmaceutical product
Classification: Cough Suppressants Expectorants Mucolytics and Nasal Decongestants
Supplier: Wyeth
   P.O. Box 8299
   Philadelphia, PA 19101 USA.
   Telephone: 1-610-688-4400

Emergency Telephone Number: Chemtrec USA, Puerto Rico, Canada 1-800-424-9300
   Chemtrec International 1-703-527-3887

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>CAS-No</th>
<th>EC No.</th>
<th>Composition</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbocisteine</td>
<td>638-23-2</td>
<td>Not available</td>
<td>18-57.5 mg/ml</td>
<td>Not determined</td>
</tr>
<tr>
<td>Inactive Ingredients</td>
<td>Not Applicable</td>
<td>Not available</td>
<td>Remainder</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Emergency Overview
This contains an active pharmaceutical ingredient that can affect body functions; handle with caution.

Appearance: Pharmaceutical Liquid
Physical State: Liquid
Odor: Fruity

Potential Physical Hazards: None known

Potential Health Effects:
- Eyes: May cause irritation
- Skin: May cause irritation
- Inhalation: Not available
- Ingestion: The most common effects may include nausea, gastrointestinal effects (ulcer, bleeding, perforation), and skin rash.

Therapeutic Target Organ(s): Respiratory system

Potential Environmental Effects: There is no known ecological information for this product.
4. FIRST AID MEASURES

**Eye Contact**
In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.

**Skin Contact**
Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

**Inhalation**
Move to fresh air. Artificial respiration and/or oxygen may be necessary. If symptoms persist, call a physician.

**Ingestion**
If symptoms persist, call a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

**Flammable Properties**
None known

**Extinguishing Media**
- **Suitable Extinguishing Media**
  - Use water spray, foam, dry chemical or carbon dioxide.
- **Unsuitable Extinguishing Media**
  - Do NOT use water jet.

**Fire Fighting**
Evacuate area and fight fire from a safe distance. Cool closed containers exposed to fire with water spray. In the event of fire and/or explosion do not breathe fumes.

**Hazardous Combustion Products**
Carbon oxides, nitrogen oxides.

**Protective Equipment and Precautions for Firefighters**
In the event of fire, wear self-contained breathing apparatus and special protective equipment for fire fighters.

6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**
Refer to protective measures listed in Sections 7 and 8.

**Environmental Precautions**
Prevent product from entering drains. Local authorities should be advised if a significant spill cannot be contained.

**Methods for Containment**
Not available

**Methods for Cleaning up**
Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Avoid formation of dust and aerosols.

7. HANDLING AND STORAGE

**Handling**
For personal protection see Section 8. Handle in accordance with good industrial hygiene and safety practice. Skin should be washed after contact. Avoid formation of dust and aerosols.

**Storage**
No special safety precautions required. Keep container tightly closed.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls
Apply technical measures to comply with the occupational exposure guideline. Local exhaust ventilation is needed for limited open handling or where aerosols may be generated.

Personal Protective Equipment

Eye/face Protection
Avoid contact with skin and eyes. Provide eye protection based on a risk assessment.

Skin Protection
For prolonged or repeated exposure use protective gloves. No special protective clothing required under typical conditions of use.

Respiratory Protection
No personal respiratory protective equipment normally required.

General Hygiene Considerations
When using, do not eat, drink or smoke. General industrial hygiene practice. Wash hands before breaks and at the end of workday.

Other
Limit access to only personnel trained in the safe handling of this material. Consult a health and safety professional for specific PPE, respirator, and risk assessment guidance.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Pharmaceutical Liquid</th>
<th>Physical State</th>
<th>Odor</th>
<th>Fruity</th>
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<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Orange - Red</td>
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<tr>
<td>Odor Threshold</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>5.7-6.5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Specific Gravity</td>
<td>1.13-1.41</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Solubility</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n-octanol/water)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point</td>
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<td></td>
<td></td>
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<tr>
<td>Flash Point</td>
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<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>Upper Not applicable</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
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<td></td>
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<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Autoignition Temperature</td>
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<tr>
<td>Melting Point</td>
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<tr>
<td>Flash Point</td>
<td>Not applicable</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Upper Not applicable</td>
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<td></td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>Upper Not applicable</td>
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</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemical Stability
Stable at room temperature.

Conditions to Avoid
No data available

Materials to Avoid
No materials to be especially mentioned.

Hazardous Decomposition Products
None under normal use.

Possibility of Hazardous Reactions
None under normal use.

11. TOXICOLOGICAL INFORMATION

The following effects are based on the Active Pharmaceutical Ingredient.

Acute Toxicity

Multiple Dose Toxicity
### 12. ECOCLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Chemical Fate Information</th>
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</thead>
<tbody>
<tr>
<td>Ecotoxicity</td>
<td>Not available</td>
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</tbody>
</table>

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method**
Dispose of in accordance with local and national regulations.

### 14. TRANSPORT INFORMATION

**Transport Information**
This material is not classified as hazardous for transport.

### 15. REGULATORY INFORMATION

According to present data no classification and labeling is required according to Directives 67/548/EEC or 1999/45/EC.

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>Prepared By</th>
<th>Wyeth Department of Environment, Health &amp; Safety</th>
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<tr>
<td>Format</td>
<td>This MSDS was prepared in accordance with Directive 2001/58/EC.</td>
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<tr>
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<td>Email N. Caceres to D. VonKaenel August 9, 2007</td>
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<td></td>
<td>Martindales</td>
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<td></td>
<td>Merck Index</td>
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**Revision Summary**
Not applicable

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End of MSDS