Material Safety Data Sheet
Ammonium Lauryl Ether Sulfate

Section 1: Chemical Product and Company Identification

Product Name: Ammonium Lauryl Ether Sulfate
Chemical Name: Ammonium Lauryl Ether Sulfate
Customs Tariff No: 34021100
Synonym Name:  
Chemical Formula: RO(CH₂CH₂O)₃SO₃NH₄

Company Information:

Chemtrade International
Rm. 201, Unit 3, Building 8, Shijia Garden, No. 93, Xiangjiang Road, Qingdao Development Zone, Qingdao, Shandong, China 266555
Tel: 0086-532-86893005
Fax: 0086-532-86893005

Section 2: Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>% by weight</th>
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</thead>
<tbody>
<tr>
<td>Ammonium Lauryl Ether Sulfate</td>
<td>32612-48-9</td>
<td></td>
<td>70</td>
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Section 3: Hazards Identification

Emergency Overview
Clear liquid, pale yellow color.
May cause moderate irritation to the eyes. May cause moderate irritation to the skin. May cause irritation to the respiratory system.

Health Effects: Eyes
Causes moderate eye irritation.

Health Effects: Skin
Causes moderate skin irritation.

Health Effects: Inhalation
Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Health Effects: Ingestion
Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Section 4: First Aid Measures

Eyes
Immediately flush eyes with water for at least 15 minutes while holding eyelids open. If irritation persists get medical attention.

Skin
For skin contact flush with large amounts of water. If irritation persists, get medical attention. Immediately take off all contaminated clothing. Wash contaminated clothing before reuse.

Inhalation
If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion
If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

Section 5: Fire and Explosion Data

Flash Point (> 93.9 °C), > 201 F PMCC
Extinguishing Media
Use appropriate methods for combating the surrounding fire.

Fire Fighting Equipment / Instructions
Firefighters should wear full fire-fighting turn-out gear (full Bunker gear) including NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Section 6: Accidental Release Measures
SPILL AND LEAK PROCEDURES

Emergency Action:
Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Wear appropriate personal protective equipment during cleanup. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Large Spills: Dike ahead of liquid spill for later disposal. Prevent entry into waterways, sewers, basements or confined areas. Surfaces may become slippery after spillage.

Section 7: Handling and Storage

Handling Procedures
Avoid contact with skin and eyes. Wash thoroughly after handling. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

Storage Procedures
Avoid freezing or excessive heat. Keep the container tightly closed and in a cool, well-ventilated place.

Section 8: Exposure Controls/Personal Protection

Engineering Controls
Use general ventilation. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

Personal Protective Equipment: Eyes/face
Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin
Wear suitable protective clothing. Use impervious gloves.

Personal Protective Equipment: Respiratory
If vapors are present or irritation is experienced, NIOSH approved respiratory protection for organic vapors should be worn.

Personal Protective Equipment: General
Eye wash fountain and emergency showers are recommended.

Section 9: Physical and Chemical Properties

Flash Point (> 93.9 °C), > 201 F PMCC
Boiling Point (> 100 °C), > 212 F
Specific Gravity (0.986 g/ml), 8.2 lb/gal @ 25 C
Percent Volatile 68 - 75 % (w/w)
Vapor Pressure Not Determined or Unknown
Vapor Density Estimated lighter than air.
Viscosity 2000 cps @ 25 C
Evaporation Rate Estimated slower than ethyl ether.
RVOC 0 %
Pour Point 41 F
pH Value 5.5 - 7 (as is)
Freezing Point (1.7 °C), 35 F
Appearance and Odor
Clear liquid, pale yellow color.

Section 10: Stability and Reactivity Data

Chemical Stability
Stable under normal conditions.
Incompatibility
This product may react with strong acids or oxidizing agents.
Hazardous Decomposition
Upon decomposition, this product may yield sulfur dioxide and oxides of sulfur.
Hazardous Polymerization
Will not occur.

Section 11: Toxicological Information

**Carcinogenicity**
Not listed as carcinogenic according to IARC, NTP or OSHA.

_**Lauryl alcohol 112-53-8**_
NIOSH - Selected LD50s and LC50s Oral LD50 Rat: >12800 mg/kg

_**Ammonium laureth (n=<3) sulfate 32612-48-9**_
NIOSH - Selected LD50s and LC50s Oral LD50 Rat: 630 mg/kg

Section 12: Ecological Information

**Ecotoxicity**
No data available on finished product.

**Environmental Fate**
This product is biodegradable.

Section 13: Disposal Considerations

**Disposal Instructions**
Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator.

Section 14: Transport Information

**DOT Proper Shipping Name**
Refer to bill of lading or container label for DOT or other transportation hazard classification, if any.

Section 15: Other Regulatory Information

**U.S. Federal Regulations**
Ingredient Name CAS Number Percent
_**Water 7732-18-5 68 - 75 %**_
_**Ammonium laureth (n=<3) sulfate 32612-48-9 24 - 26 %**_
_**Lauryl alcohol 112-53-8 < 2 %**_

**State Regulations**
This product may contain the following ingredient(s) known to the State of California to cause cancer, birth defects or other reproductive harm: 1,4-Dioxane (CAS RN: 123-91-1)

**Canada_WHMIS**
D2B

**Inventories**
All components of this product are listed on the following inventories: U.S.A.(TSCA), Canada(DSL), Europe(EINECS/ELINCS/Polymer/NLP), Australia(AICS), Korea(ECL), Philippines(PICCS), Japan(ENCS), China (EICS).
There is no calculable reportable quantity (RQ) for this product.

Section 16: Other Information

**MSDS Creation Date:** 6/16/2000
**Revision #4 Date:** 3/15/2007

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