SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier
 Chemical Name: Sulfuric acid, mono-C10-a6 alkyl esters, sodium salts
 Trade name: NAXOLATE® AS-LC30
 CAS No.: 68585-47-7

Relevant identified uses of the substance or mixture and uses advised against
 Identified use(s): Emulsifier
 Uses advised against: None

Details of the supplier of the safety data sheet
 Company Identification: Nease Co. LLC
 10740 Paddys Run Road
 Harrison, OH 45030
 Telephone: (513) 738-1255
 Telephone (Product Information): (888) 762-7373
 Fax: (513) 587-2828
 E-Mail (competent person): techservice@neaseco.com

Emergency telephone number
 Emergency Phone No.: (513) 738-1255
 CHEMTREC 24 hr. (800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture
 OSHA HCS (29 CFR 1910.1200): Eye Dam. 1; Skin Irrit. 2; Acute tox. (oral) 4

Label elements

Signal word(s)
DANGER

Hazard statement(s)
Causes serious eye damage.
Causes skin irritation.
Harmful if swallowed

Precautionary statement(s)
Wash thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid release to the environment
IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Call doctor or POISON CENTER
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation (redness, rash, blistering) develops, get medical attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

Other hazards
Harmful to aquatic life with long lasting effects. Not classified as PBT or vPvB.
Additional Information

Contains residual formaldehyde. Studies in animals have shown that repeated exposures may cause cancer by inhalation. However, given the relatively low concentration of formaldehyde present, this product is not considered to pose a cancer risk to humans.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Composition/information on ingredients</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>Hazard statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfuric acid, mono-C10-C16 alkyl esters, sodium salts</td>
<td>25 - 35%</td>
<td>68585-47-7</td>
<td>Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>Water</td>
<td>65 – 75%</td>
<td>7732-18-5</td>
<td>None</td>
</tr>
</tbody>
</table>

Additional Information- Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below.

–Formaldehyde (CAS No. 50-00-0, <0.1%)

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation
Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is laboured, administer oxygen. If breathing has stopped, apply artificial respiration.

Skin Contact
Wash affected skin with plenty of water. Continue to wash the affected area for at least 15 minutes. Remove contaminated clothing and wash clothing before reuse.

Eye Contact
Immediately flush eyes for at least 15 minutes. Hold eye open and rinse slowly and gently with water. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

Ingestion
If ingested, rinse mouth. Do not induce vomiting. Seek medical treatment.

Most important symptoms and effects, both acute and delayed
None

Indication of any immediate medical attention and special treatment needed
None

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

-Suitable Extinguishing Media
Extinguish with waterspray, dry chemical, sand or carbon dioxide or foam. Do not use water jet on a leak from the tank. Water spray should be used to cool containers.

- Unsuitable Extinguishing Media
None anticipated.

Special hazards arising from the substance or mixture
None anticipated.

Advice for fire-fighters
Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Water spray should be used to cool containers.

Revision: 12 June 2015
SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Put on protective equipment before entering danger area.

Environmental precautions
Do not allow to enter drains, sewers or watercourses.

Methods and material for containment and cleaning up
Contain spillages with sand, earth or any suitable adsorbent material. Transfer to a container for disposal or recovery. Wash the spillage area with water. If possible prevent water running into sewers.

Reference to other sections
None

Additional Information
None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling
Keep container in a well-ventilated place. Keep container closed.

Conditions for safe storage, including any incompatibilities
- Storage Temperature below 49 °C (120°F). Do not allow material to freeze.
- Incompatible materials None known.

Specific end use(s)
Emulsifier

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>CAS No.</th>
<th>LTEL (8 hr TWA ppm)</th>
<th>STEL (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PEL (OSHA)</td>
<td>TLV (ACGIH)</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>0.75</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recommended monitoring method
None

Exposure controls
Not normally required.

Personal protection equipment

Eye/face protection
Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)
The following to be used as necessary: Gloves (Neoprene or Natural rubber). Check with protective equipment manufacturer's data.

Respiratory protection
No personal respiratory protective equipment normally required.

Thermal hazards
Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls
Do not allow to enter drains, sewers or watercourses.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- **Appearance**: Viscous Liquid
- **Colour**: Water-White
- **Odour**: Mild, Fatty Odour
- **Odour Threshold (ppm)**: Not available.
- **pH (Value)**: 7.5-8.5 (10% aqueous solution)
- **Melting Point (°C) / Freezing Point (°C)**: Not available.
- **Boiling point/boiling range (°C)**: 100 (212°F)
- **Flash Point (°C)**: >93 (200°F)
- **Evaporation rate (butyl acetate=1)**: <1
- **Flammability (solid, gas)**: Not available.
- **Explosive limit ranges**: Not available.
- **Vapour Pressure (Pascal)**: Low.
- **Vapour Density (Air=1)**: Not available
- **Density (g/ml)**: 1.0-1.1
- **Solubility (Water)**: Soluble.
- **Solubility (Other)**: Not available.
- **Partition Coefficient (n-Octanol/water)**: Not available.
- **Auto Ignition Temperature (°C)**: Not available.
- **Decomposition Temperature (°C)**: Not available.
- **Kinematic Viscosity (cSt) @ 40°C**: Not available.
- **Explosive properties**: Not available
- **Oxidising properties**: Not oxidising.
- **Other information**: Not available.

SECTION 10: STABILITY AND REACTIVITY

- **Reactivity**: Stable under normal conditions.
- **Chemical stability**: Stable.
- **Possibility of hazardous reactions**: None anticipated.
- **Conditions to avoid**: Incompatible materials.
- **Incompatible materials**: None known.
- **Hazardous Decomposition Product(s)**: Carbon monoxide, Carbon dioxide, Sulphur oxides

SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure routes**: Skin Contact, Eye Contact

**Substances in preparations / mixtures**

*Sulfuric acid, mono-C10-a6 alkyl esters, sodium salts (CAS 68585-47-7)*

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Oral: ATEmix: 300-2000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritation/Corrosivity</td>
<td>Causes serious eye damage. Causes skin irritation.</td>
</tr>
<tr>
<td>Sensitization</td>
<td>No data available</td>
</tr>
<tr>
<td>Repeated dose toxicity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Carcinogenicity**

<table>
<thead>
<tr>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>NIOSH</th>
</tr>
</thead>
</table>

- **Mutagenicity**: No data available
- **Toxicity for reproduction**: No data available
**SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity - Substances in preparations / mixtures**

Sulfuric acid, mono-C10-a6 alkyl esters, sodium salts (CAS 68585-47-7)

<table>
<thead>
<tr>
<th>Short term</th>
<th>Long Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 (96 hour): 3.6 mg/L <em>(Fathead minnow)</em></td>
<td>No data</td>
</tr>
<tr>
<td>EC50 (48 hour): 4.7 mg/l <em>(Daphnia magna)</em></td>
<td></td>
</tr>
<tr>
<td>EC50 (21 day): 0.14 mg/l <em>(Daphnia magna)</em></td>
<td></td>
</tr>
<tr>
<td>EC50 (72 hour): &gt;20 mg/l <em>(Scenedesmus quadricauda)</em></td>
<td></td>
</tr>
</tbody>
</table>

**Persistence and degradability**
Biodegradable.

**Bioaccumulative potential**
Not available.

**Mobility in soil**
No data available

**Results of PBT and vPvB assessment**
Not classified as PBT or vPvB.

**Other adverse effects**
None

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste treatment methods**
Dispose of contents in accordance with local, state or national legislation.

**Additional Information**
None known.

**SECTION 14: TRANSPORT INFORMATION**

<table>
<thead>
<tr>
<th>Land transport (U.S. DOT)</th>
<th>Sea transport (IMDG)</th>
<th>Air transport (ICAO/IATA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified as dangerous for transport</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**UN number**

**Proper Shipping Name**

**Transport hazard class(es)**

**Packing group**

**Hazard label(s)**

**Environmental hazards**

**Special precautions for user**

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

**SECTION 15: REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture:

**TSCA (Toxic Substance Control Act)** - Inventory Status: All components listed or polymer exempt.

**Canada Domestic Substance List (DSL) - Listed**

**Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
<th>RQ (Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>******</td>
<td>****</td>
<td>****</td>
</tr>
</tbody>
</table>

**SARA 311/312 - Hazard Categories:**

- [ ] Fire
- [ ] Sudden Release
- [ ] Reactivity
- [x] Immediate (acute)
- [ ] Chronic (delayed)

**SARA 313 - Toxic Chemicals (40 CFR 372):**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>******</td>
<td>****</td>
</tr>
</tbody>
</table>

**SARA 302 - Extremely Hazardous Substances(40 CFR 355):**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>******</td>
<td>****</td>
</tr>
</tbody>
</table>
SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: June 12, 2015

Additional Information:

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