### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name</td>
<td>Foam-Lok FL 500</td>
</tr>
<tr>
<td>Product code</td>
<td>FL 500</td>
</tr>
</tbody>
</table>

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

<table>
<thead>
<tr>
<th>Use of the substance/mixture</th>
<th>Open-cell spray applied foam when installed following application guidelines adheres to framing members and substrates.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of the substance/mixture</td>
<td>A component for the production of spray insulation foam</td>
</tr>
</tbody>
</table>

#### 1.3. Details of the supplier of the safety data sheet

Lapolla Industries, Inc.
15402 Vantage Parkway East, Ste. 322
Houston, Texas 77032
Tel: +1 281 219 4100, (877) 636-2648
Email: sds@lapolla.com

#### 1.4. Emergency telephone number

Emergency number: CARECHEM (866) 928-0789

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**GHS-US classification**
- Skin Irrit. 2  H315
- Eye Dam. 1  H318

#### 2.2. Label elements

**GHS-US labelling**

Hazard pictograms (GHS-US): ![GHS05](image)

Signal word (GHS-US): Danger

Hazard statements (GHS-US):
- H315 - Causes skin irritation
- H318 - Causes serious eye damage

Precautionary statements (GHS-US):
- P264 - Wash hands, face thoroughly after handling
- P280 - Wear eye protection, protective gloves, protective clothing
- P302+P352 - If on skin: Wash with plenty of water
- P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P310 - Immediately call a doctor, a POISON CENTER
- P321 - Specific treatment (see on this label)
- P332+P313 - If skin irritation occurs: Get medical advice/attention
- P362 - Take off contaminated clothing and wash before reuse

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Not applicable
Foam-Lok FL 500  
Safety Data Sheet  
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol, 1-chloro-, phosphate (3:1)</td>
<td>(CAS No) 13674-84-5</td>
<td>&lt;30</td>
<td>Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha.-[4-nonylphenyl]-omega.-hydroxy-, branched</td>
<td>(CAS No) 127087-87-0</td>
<td>&lt;20</td>
<td>Acute Tox. 4 (Oral), H302 Skin Irr. 2, H315 Eye Irr. 2A, H319</td>
</tr>
<tr>
<td>1-Propanol, 2,2-dimethyl-, tribromo derivative</td>
<td>(CAS No) 36483-57-5</td>
<td>&lt;15</td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td>Ethanol, 2-[2-(dimethylamino)ethyl]methylamino-</td>
<td>(CAS No) 2212-32-0</td>
<td>1 - 7</td>
<td>Skin Irrit. 2, H315 Eye Dam. 1, H318</td>
</tr>
<tr>
<td>Bis(2-dimethylaminoethyl) ether</td>
<td>(CAS No) 3033-62-3</td>
<td>0.5 - 3</td>
<td>Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

**SECTION 4: First aid measures**

4.1. Description of first aid measures

First-aid measures general: In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical advice.

First-aid measures after skin contact: Remove contaminated clothing immediately. Wash skin thoroughly with mild soap and water. Seek medical attention immediately.

First-aid measures after eye contact: Rinse immediately with plenty of water for 15 minutes. Contact lenses should be removed. Immediately get medical attention.

First-aid measures after ingestion: If swallowed, seek medical advice immediately and show this container or label. Rinse mouth immediately and drink plenty of water. Call a POISON CENTER or doctor/physician. Never give anything by mouth to an unconscious person. If unconscious, place in the recovery position and seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: Inhalation of mist or aerosol may cause irritation to nose and throat. High concentration of vapours may induce: headache, nausea, dizziness. May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact: Causes skin irritation.

Symptoms/injuries after eye contact: Causes serious eye damage.

Symptoms/injuries after ingestion: Can occur: Gastrointestinal disturbance. Tremor. Incoordination, dizziness, headache, nausea, mental confusion slurred speech depending to quantity of ingested material.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

**SECTION 5: Firefighting measures**

5.1. Extinguishing media


Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protective equipment for firefighters: Use self-contained breathing apparatus and chemically protective clothing. Complete protective clothing.

Other information: Prevent entry to sewers and public waters.

**SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Stop leak if safe to do so. Spills of this product present a serious slipping hazard. Avoid breathing mist or vapor. Avoid contact with skin, eyes and clothing.

6.1.1. For non-emergency personnel

Protective equipment: Wear suitable protective clothing. Refer to section 8.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ensure adequate ventilation.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Relevant water authorities should be notified of any large spillage to water course or drain.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into inert absorbent material. Sweep or shovel spills into appropriate container for disposal. Ensure all national/local regulations are observed. Wash contaminated area with hot water, soap. Consult the appropriate authorities about waste disposal.

6.4. Reference to other sections
Refer to sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Obtain special instructions before use. Avoid mixing with air or use for any purpose above atmospheric pressure.
Product should not be mixed with air above atmospheric pressure for leak testing or any other purpose.
Use dry nitrogen to transfer or leak test equipment pressurized with product. Keep away from open flames, hot surfaces and sources of ignition.
Wear recommended personal protective equipment. Use appropriate respiratory protection.

Hygiene measures: Wash contaminated clothing prior to re-use. Always wash hands and face immediately after handling this product, and once again before leaving the workplace. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Provide local exhaust or general room ventilation. A washing facility/water for eye and skin cleaning purposes should be present.
Storage conditions: Keep out of direct sunlight. Store in original container. Keep container tightly closed in a cool, well-ventilated place. Keep away from heat. Do not freeze. Product that is frozen and/or tending to sedimentation can be liquefied or homogenized by careful application of indirect heat (do not use flames or direct contact with a heat source). Protect from moisture.
Storage temperature: 21 - 26 °C (70 - 80 °F)

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Bis(2-dimethylaminoethyl) ether (3033-62-3)</th>
<th>USA ACGIH</th>
<th>ACGIH TWA (ppm)</th>
<th>0.05 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH STEL (ppm)</td>
<td>0.15 ppm</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Provide local exhaust or general room ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.


Hand protection: Wear suitable gloves resistant to chemical penetration. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection: Tightly fitting safety goggles. Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection: Protective clothing.

Respiratory protection: Full face piece respirator. Approved supplied air respirator.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Dark orange to brown</td>
</tr>
<tr>
<td>odour</td>
<td>Amine-like</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>&gt;= 7</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200 °C (closed cup)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.15 - 1.17 g/cm³ @ 25°C (Bulk Density)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Slightly soluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>800 - 1000 mPa.s @ 23 °C</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under recommended condition.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid


10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified

Based on available data, the classification criteria are not met

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

<table>
<thead>
<tr>
<th>LD50 oral rat</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>930 - 1550 mg/kg</td>
</tr>
</tbody>
</table>
## 2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal rabbit</td>
<td>1230 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 17.8 mg/l (Exposure time: 1 h)</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>930.00000000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>1230.00000000 mg/kg bodyweight</td>
</tr>
</tbody>
</table>

### Bis(2-dimethylaminoethyl) ether (3033-62-3)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>910 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>238 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>117 ppm (Exposure time: 6 h)</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>910.00000000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>238.00000000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>4500.00000000 ppmv/4h</td>
</tr>
<tr>
<td>ATE US (vapours)</td>
<td>11.00000000 mg/l/4h</td>
</tr>
<tr>
<td>ATE US (dust,mist)</td>
<td>1.50000000 mg/l/4h</td>
</tr>
</tbody>
</table>

### Poly(oxy-1,2-ethanediyl), .alpha.- (4-nonylphenyl)-omega.-hydroxy-, branched (127087-87-0)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>L50 oral rat</td>
<td>1310 mg/kg</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>1310.00000000 mg/kg bodyweight</td>
</tr>
</tbody>
</table>

### Skin corrosion/irritation

- Causes skin irritation.
  - pH: >= 7

### Serious eye damage/irritation

- Causes serious eye damage.
  - pH: >= 7

### Respiratory or skin sensitisation

- Not classified
  - Based on available data, the classification criteria are not met

### Germ cell mutagenicity

- Not classified
  - Based on available data, the classification criteria are not met

### Carcinogenicity

- Not classified
  - Based on available data, the classification criteria are not met

### Reproductive toxicity

- Not classified
  - Based on available data, the classification criteria are not met

### Specific target organ toxicity (single exposure)

- Not classified
  - Based on available data, the classification criteria are not met

### Specific target organ toxicity (repeated exposure)

- Not classified
  - Based on available data, the classification criteria are not met

### Aspiration hazard

- Not classified
  - Based on available data, the classification criteria are not met

### Symptoms/injuries after inhalation

- Inhalation of mist or aerosol may cause irritation to nose and throat. High concentration of vapours may induce: headache, nausea, dizziness. May cause irritation to the respiratory tract.

### Symptoms/injuries after skin contact

- Causes skin irritation.

### Symptoms/injuries after eye contact

- Causes serious eye damage.

### Symptoms/injuries after ingestion

- Can occur: Gastrointestinal disturbance. Tremor. Incoordination, dizziness, headache, nausea, mental confusion slurred speech depending to quantity of ingested material.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### 2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes 1</td>
<td>56.2 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>63 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 1</td>
<td>45 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>180 mg/l (Exposure time: 96 h - Species: Leuciscus idus [static])</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 2</td>
<td>4 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)</td>
</tr>
</tbody>
</table>

### 12.2 Persistence and degradability

No additional information available
12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>1.9 - 4.6</td>
</tr>
<tr>
<td>Log Pow</td>
<td>2.59</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer : No additional information available
Effect on the global warming : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Product wastes can often be incinerated in approved facilities. Consult the appropriate authorities about waste disposal.

Additional information : Do not re-use empty containers. Do not dispose of waste into sewer. Do not cut, grind, drill, weld, reuse or dispose off containers unless adequate precautions are taken against these hazards. Container Disposal: Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers). Decontaminate containers prior to disposal. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Ensure all national/local regulations are observed.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR
Transport document description : No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations
No additional information available

15.2. International regulations

CANADA
No additional information available

EU-Regulations
No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
No additional information available

15.2.2. National regulations
No additional information available
Foam-Lok FL 500 Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

15.3. US State regulations
No additional information available

SECTION 16: Other information

Indication of changes
accordi#ng to the federal final rule of hazard communication revised on 2012 (HazCom 2012).

Revision date
10/15/2014 12:00:00 AM

Sources of Key data
Data sources: SDS - Safety Data Sheet.

Abbreviations and acronyms

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>Acute Tox. 3 (Dermal)</th>
<th>Acute toxicity (dermal) Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Dermal)</td>
<td>Acute toxicity (dermal) Category 4</td>
</tr>
<tr>
<td>Acute Tox. 4 (Inhalation)</td>
<td>Acute toxicity (inhalation) Category 4</td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral), Category 4</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation, Category 2A</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation Category 1B</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H311</td>
<td>Toxic in contact with skin</td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
</tbody>
</table>

HMIS III Rating

Health           : 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability     : 1 Slight Hazard
Physical         : 1 Slight Hazard

SDS US (GHS HazCom 2012)

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