SECTION 1: Identification

1.1. Identification

Product form : Mixtures
Product name : Linear Alkylbenzene Sulfonate, 1mL = 1mg
Product code : LC16150

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.
Recommended use : Laboratory chemicals
Restrictions on use : Not for food, drug or household use

1.3. Supplier

LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Not classified

2.2. GHS Label elements, including precautionary statements

Not classified as a hazardous chemical.
Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>99.39</td>
<td>Not classified</td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td>(CAS-No.) 7664-93-9</td>
<td>0.5</td>
<td>Skin Corr. 1A, H314, Eye Dam. 1, H318</td>
</tr>
<tr>
<td>Dodecylbenzenesulfonic Acid, Sodium Salt</td>
<td>(CAS-No.) 25155-30-0</td>
<td>0.11</td>
<td>Acute Tox. 4 (Oral), H302, Skin Irrit. 2, H315, Eye Irrit. 2A, H319, Aquatic Acute 3, H402</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effects (acute and delayed)
Symptoms/effects: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary
Treat symptomatically. Obtain medical assistance.

SECTION 5: Fire-fighting measures
5.1. Suitable (and unsuitable) extinguishing media
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical
No additional information available

5.3. Special protective equipment and precautions for fire-fighters
Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Protective equipment: Safety glasses. Gloves.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container closed when not in use. Refrigerate.
Incompatible products: Strong bases. Strong oxidizers.
Incompatible materials: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters

<table>
<thead>
<tr>
<th>Dodecylbenzenesulfonic Acid, Sodium Salt (25155-30-0)</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfuric Acid (7664-93-9)</td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
<tr>
<td>IDLH</td>
<td>US IDLH (mg/m³)</td>
</tr>
</tbody>
</table>
Linear Alkylbenzene Sulfonate, 1mL = 1mg
Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Sulfuric Acid (7664-93-9)</th>
<th>NIOSH</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
<th>1 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water (7732-18-5)</td>
<td></td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls

Appropriate engineering controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Safety glasses.

Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Respiratory protection not required in normal conditions

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Color: Colorless
Odor: None.
Odor threshold: No data available
pH: No data available
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Relative evaporation rate (butyl acetate=1): No data available
Flammability (solid, gas): Non flammable.
Vapor pressure: No data available
Relative vapor density at 20 °C: No data available
Relative density: No data available
Specific gravity / density: 1 g/ml
Solubility: Soluble in water.
Log Pow: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Linear Alkylbenzene Sulfonate, 1mL = 1mg  
Safety Data Sheet  
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Explosion limits : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available  

9.2. Other information  
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity  
No additional information available

10.2. Chemical stability  
Refrigeration enhances stability.

10.3. Possibility of hazardous reactions  
Not established.

10.4. Conditions to avoid  
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials  
Strong oxidizers. Strong bases.

10.6. Hazardous decomposition products  
Sulfur compounds. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects  
Likely routes of exposure : Skin and eye contact  
Acute toxicity : Not classified

Dodecylbenzenesulfonic Acid, Sodium Salt (25155-30-0)  
LD50 oral rat 438 mg/kg  
ATE US (oral) 438 mg/kg body weight

Sulfuric Acid (7664-93-9)  
LD50 oral rat 2140 mg/kg body weight (Rat; Experimental value)  
ATE US (oral) 2140 mg/kg body weight

Water (7732-18-5)  
LD50 oral rat ≥ 90000 mg/kg  
ATE US (oral) 90000 mg/kg body weight

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

Sulfuric Acid (7664-93-9)  
Additional information Strong inorganic acid mists containing sulfuric acid are carcinogenic to humans  
IARC group 1 - Carcinogenic to humans  
National Toxicology Program (NTP) Status 2 - Known Human Carcinogens

Reproductive toxicity : Not classified  
Specific target organ toxicity – single exposure : Not classified  
Specific target organ toxicity – repeated exposure : Not classified  
Aspiration hazard : Not classified
Linear Alkylbenzene Sulfonate, 1mL = 1mg
Safety Data Sheet

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Dodecylbenzenesulfonic Acid, Sodium Salt (25155-30-0)
- LC50 fish 1: 10.8 mg/l 96 h
- EC50 Daphnia 1: 19.87 mg/l 48 h

Sulfuric Acid (7664-93-9)
- LC50 fish 1: 42 mg/l (LC50; 96 h)
- EC50 Daphnia 1: 29 mg/l (EC50; 24 h)

12.2. Persistence and degradability

Linear Alkylbenzene Sulfonate, 1mL = 1mg
Persistence and degradability: Not established.

Sulfuric Acid (7664-93-9)
- Persistence and degradability: Biodegradability: not applicable.
- Biochemical oxygen demand (BOD): Not applicable
- Chemical oxygen demand (COD): Not applicable
- ThOD: Not applicable

Water (7732-18-5)
- Persistence and degradability: Not established.

12.3. Bioaccumulative potential

Linear Alkylbenzene Sulfonate, 1mL = 1mg
Bioaccumulative potential: Not established.

Dodecylbenzenesulfonic Acid, Sodium Salt (25155-30-0)
- Log Pow: 0.5

Sulfuric Acid (7664-93-9)
- Log Pow: -2.2 (Estimated value)
- Bioaccumulative potential: Bioaccumulation: not applicable.

Water (7732-18-5)
Bioaccumulative potential: Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming: No known effects from this product.
GWPmix comment: No known effects from this product.
Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated
SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Reporting Quantity</th>
<th>Hazard Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dodecylbenzenesulfonic Acid, Sodium Salt (25155-30-0)</td>
<td>1000 lb</td>
<td>Immediate (acute) health hazard</td>
</tr>
<tr>
<td>Sulfuric Acid (7664-93-9)</td>
<td>1000 lb</td>
<td>Immediate (acute) health hazard</td>
</tr>
</tbody>
</table>

15.2. International regulations

CANADA

Dodecylbenzenesulfonic Acid, Sodium Salt (25155-30-0)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
No additional information available

National regulations

Dodecylbenzenesulfonic Acid, Sodium Salt (25155-30-0)
Listed on the Canadian IDL (Ingredient Disclosure List)

Sulfuric Acid (7664-93-9)
Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 06/06/2017
Other information : None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>H-Phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed</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>H402</td>
<td>Harmful to aquatic life</td>
</tr>
</tbody>
</table>
Linear Alkylbenzene Sulfonate, 1mL = 1mg
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NFPA health hazard: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard: 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity: 0 - Material that in themselves are normally stable, even under fire conditions.

Hazard Rating
Health: 0 Minimal Hazard - No significant risk to health
Flammability: 0 Minimal Hazard - Materials that will not burn
Physical: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection: B
B - Safety glasses, Gloves

SDS US LabChem

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