SELECTION1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Chemical type: C10-14 Alkyl benzene sulfonic acid
Name: LABS

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

1.2.1. Relevant identified uses

Use of the substance/preparation: Raw material for producing detergent products.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Middle East Sulphonation
Northern Industrial Area
10200 Kiryat Shmona - Israel
T 972-4-6904224 - F 972-4-6904227
asher_bluestein@hotmail.com

1.4. Emergency telephone number

Emergency number: 972-8-9253321

<table>
<thead>
<tr>
<th>Country</th>
<th>Official advisory body</th>
<th>Address</th>
<th>Emergency number</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED KINGDOM</td>
<td>National Poisons Information Service</td>
<td>Dudley Road B18 7CH Birmingham</td>
<td>0870 600 6266 (UK only)</td>
</tr>
</tbody>
</table>

SELECTION2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302
Skin Corr. 1B H314

Full text of H-phrases: see section 16.

2.1.2. Classification according to Directive 67/548/EEC or 1999/45/EC

Xn;R22 C;R34

Full text of R-phrases: see section 16.

2.1.3. Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Labelling elements

2.2.1. Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP): GHS05 GHS07

Signal word (CLP): Danger
Hazard statements (CLP): H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
Precautionary statements (CLP): P260 - Do not breathe vapours, mist.
P264 - Wash clothing thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective clothing, eye protection.
P301+P312 - If swallowed, call a doctor if you feel unwell.
P301+P330+P331 - If swallowed: Rinse mouth. Do NOT induce vomiting.
2.2.2. Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols:

- C - Corrosive

R-phrases:

- R22 - Harmful if swallowed
- R34 - Causes burns

S-phrases:

- S23 - Do not breathe vapour
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S36/37/39 - Wear suitable protective clothing, gloves, and eye/face protection
- S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
- S28 - After contact with skin, wash immediately with plenty of water and soap
- S35 - This material and its container must be disposed of in a safe way

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Directive 67/548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>C10-14 Alkyl benzene sulfonic acid</td>
<td>(CAS No.)85536-14-7</td>
<td>&gt; 96,5</td>
<td>Xn;R22 C;R34</td>
</tr>
<tr>
<td>Sulphuric acid</td>
<td>(CAS No.)7664-93-9</td>
<td>&lt;= 1</td>
<td>C; R35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>C10-14 Alkyl benzene sulfonic acid</td>
<td>(CAS No.)85536-14-7</td>
<td>&gt; 96,5</td>
<td>Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314</td>
</tr>
<tr>
<td>Sulphuric acid</td>
<td>(CAS No.)7664-93-9</td>
<td>&lt;= 1</td>
<td>Skin Corr. 1A, H314 Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

Full text of R-, H- and EUH-phrases: see section 16.

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general:

- Immediately consult a doctor/medical service.

First-aid measures after inhalation:

- Remove the victim into fresh air. If breathing stops, give artificial respiration. In case of breathing difficulties administer oxygen. Consult a doctor.

First-aid measures after skin contact:

- Rinse immediately with plenty of water for 15 minutes. Remove and wash contaminated clothing before re-use. Call a doctor immediately.

First-aid measures after eye contact:

- Rinse immediately with plenty of water for 15 minutes. Call a doctor immediately.

First-aid measures after ingestion:

- Do not induce vomiting because of corrosive effects. Immediately consult a doctor/medical service. If swallowed, rinse mouth with water (only if the person is conscious). Never give anything by mouth to an unconscious person or a person with cramps.

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

Symptoms/injuries:

- Caustic burns/corrosion of the skin. Corrosion of the eye tissue.

Symptoms/injuries after inhalation:

- May cause irritation to the respiratory tract and to other mucous membranes. Possible oedema of the upper respiratory tract.

Symptoms/injuries after skin contact:

- May cause skin irritation / dermatitis / skin burns.

Symptoms/injuries after eye contact:

- Causes serious eye burns. Danger of very serious irreversible effects.

Symptoms/injuries after ingestion:

- Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Irritating to the digestive tract. May cause burns.

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

No additional information available

08/01/2011 EN (English) 2/6
SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: carbon dioxide (CO2), powder, alcohol-resistant foam, hazy water.
Unsuitable extinguishing media: NEVER direct water jet on liquid.

5.2. Special hazards arising from the substance or mixture
General measures: Use a water spray to cool exposed surfaces and to protect fire-fighters.

5.3. Advice for firefighters
Protection during firefighting: Wear self-contained breathing apparatus and protective suit (see item 8).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Protective equipment: Wear self-contained breathing apparatus and protective suit (see item 8).

6.1.2. For emergency responders
Protective equipment: Wear full protective clothing and breathing apparatus when dealing with all spillage (see item 8).

6.2. Environmental precautions
Prevent liquid from entering sewers, watercourses, underground or low areas.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite. Collect all waste in suitable and labelled containers and dispose according to local legislation. Provide adequate ventilation.

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wash thoroughly after handling. Remove immediately contaminated clothing. Wash contaminated clothing prior to re-use. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Avoid inhalation of vapour and spray mist.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in dry, cool area. Keep container closed when not in use. Keep away from oxidizing agents. Keep in a cool place away from metals. Store separately from strongly alkaline.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls
Appropriate engineering controls: Facilities: shower, eye shower. Local exhaust and general ventilation must be adequate to meet exposure standards.
Eye protection: Chemical goggles or face shield.
Skin and body protection: Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
Respiratory protection: half-mask with filter according to EN 149.
### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>Viscous liquid.</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>Brown.</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>Sulfurous.</td>
</tr>
<tr>
<td><strong>Odour threshold</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>1 in 1% solution.</td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Solidification point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Relat. evapor. rate comp. to butylacetate</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Explosive limits</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Relative vapour density at 20 °C</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>1.05 g/cm³ at 25°C</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Stable.</td>
</tr>
<tr>
<td><strong>Log Pow</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Self ignition temperature</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></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

On burning: release of toxic and corrosive gases/vapours (carbon monoxide - carbon dioxide, sulphur oxides).

#### 10.2. Chemical stability

Stable under normal conditions. Thermal decomposition temperature is above 80°C.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

No additional information available

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

No additional information available

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

- **Acute toxicity**: Harmful if swallowed.
- **Skin corrosion/irritation**: Causes severe skin burns and eye damage.

<table>
<thead>
<tr>
<th>Compound</th>
<th>Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LABS</strong></td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>200 mg/kg</td>
</tr>
<tr>
<td>ATE oral</td>
<td>500,000 mg/kg</td>
</tr>
<tr>
<td><strong>C10-14 Alkyl benzene sulfonic acid (85536-14-7)</strong></td>
<td></td>
</tr>
<tr>
<td>ATE oral</td>
<td>500,000 mg/kg</td>
</tr>
</tbody>
</table>

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water: Aquatic: Water temperature affects biodegradation. The rate of sodium-C12 linear alkylbenzene sulfonic acids biodegradation in Chesapeake Bay water was max at 25-30 deg C and decreased at lower incubation temperatures. Sodium-C12 linear alkylbenzene sulfonic acids...
12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
Ecology - soil
The adsorption of sodium-C12 linear alkylbenzene sulfonic acids is affected by the type of soil. The affinity of the soil for surfactants competes with microbial attack, slowing biodegradation.

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Regional legislation (waste) : Dispose of in accordance with relevant local regulations.

SECTION 14: Transport information

14.1. UN number
UN-No. : 2586

14.2. UN proper shipping name
Proper Shipping Name : ALKYLSULPHONIC ACIDS, LIQUID / ARYLSULPHONIC ACIDS, LIQUID
Transport document description : UN 2586 ALKYLSULPHONIC ACIDS, LIQUID / ARYLSULPHONIC ACIDS, LIQUID, 8, III, (E)

14.3. Transport hazard class(es)

14.3.1. Overland transport
Class (ADR) : 8 - Corrosive substances
Hazard identification number (Kemler No.) : 80
Classification code (ADR) : C3
Danger labels (ADR) : 8 - Corrosive substances

Orange plates : 80

Tunnel restriction code (ADR) : E
Limited quantities (ADR) : LQ07
Excepted quantities (ADR) : E1

14.3.2. Transport by sea
No additional information available

14.3.3. Air transport
No additional information available

14.4. Packing group
Packing group (ADR) : III

14.5. Environmental hazards
Other information : No supplementary information available.

14.6. Special precautions for user
No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No additional information available
SECTION 15: Regulatory information

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

15.1.1. EU-Regulations
No additional information available

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (Oral) Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious Eye Damage/Irritation Category 1</td>
</tr>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin Corrosion/Irritation Category 1A</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin Corrosion/Irritation Category 1B</td>
</tr>
<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>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>R22</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>R34</td>
<td>Causes burns</td>
</tr>
<tr>
<td>R35</td>
<td>Causes severe burns</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.