1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity: Kitchen Mate Dishwashing Detergent

Alternate Names: Specification: P-D-410C Type II
LHB Part Number: 1064011, 1064012
National Stock Number: 7930-00-880-4454, 7930-00-899-9534
CAGE Code: 1A864
Contract Number: GS-07F-R0002

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

Intended use: See product label.
Application Method: See product label.

1.3. Details of the supplier of the safety data sheet

Company Name: LHB Industries
8833 Fleischer Place
Berkeley, MO 63134

Emergency
24 hour Emergency Telephone No.: (800) 633-8253 (PERS)
Customer Service: LHB Industries (314) 423-4333

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Acute Tox. 5;H303 May be harmful if swallowed. (Not adopted by US OSHA)
Acute Tox. 5;H313 May be harmful in contact with skin. (Not adopted by US OSHA)

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Warning

H303 May be harmful if swallowed.
H313 May be harmful in contact with skin.

Prevention:
No GHS prevention statements

Response:
P312 Call a POISON CENTER or doctor / physician if you feel unwell.
[Storage]:
No GHS storage statements

[Disposal]:
No GHS disposal statements

### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenol polyethoxylate</td>
<td>10 - 25</td>
<td>Eye Dam. 2A;H319</td>
<td>[1][3]</td>
</tr>
<tr>
<td>CAS Number: 0009016-45-9</td>
<td></td>
<td>Skin Irrit. 2;H315</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aquatic Chronic 2;H411</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute Tox. 4;H302</td>
<td></td>
</tr>
<tr>
<td>Dodecylbenzenesulfonic acid.</td>
<td>10 - 25</td>
<td>Acute Tox. 4;H302</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0027176-87-0</td>
<td></td>
<td>Skin Corr. 1B;H314</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute Tox. 3;H311</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye Dam. 1;H318</td>
<td></td>
</tr>
</tbody>
</table>

[1] Substance classified with a health or environmental hazard.
*The full texts of the phrases are shown in Section 16.

### 4. First aid measures

#### 4.1. Description of first aid measures

**General**
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

**Inhalation**
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes**
Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin**
Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion**
Drink 1 or 2 glasses of water.

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

**Overview**
Health Hazards (Acute and Chronic):
Ingestion: Ingestion may cause transient gastrointestinal irritation.
Eye Contact: May cause mild transient irritation.
Skin: Transient irritation with prolonged exposure to concentrated material.
Signs and Symptoms of Exposure:
Ingestion: May result in nausea, vomiting, and/or diarrhea.
Eye Contact: May cause stinging, tearing, itching, swelling, and/or redness.
Skin: Prolonged contact with concentrated material may cause temporary drying and irritation See section 2 for further details.

Skin
May be harmful in contact with skin.

Ingestion
May be harmful if swallowed.

5. Fire-fighting measures

5.1. Extinguishing media
Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.
Do not use; water jet.

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition: No hazardous decomposition data available.
Do not breathe mist / vapors / spray.

5.3. Advice for fire-fighters
None
ERG Guide No. ---

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Read entire label before using product

6.2. Environmental precautions
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up
Wipe, scrape or soak up contents in an inert material. Pick up spill for recovery or disposal and place in a closed container. Dispose of in accordance with applicable Federal, State and Local regulations.

7. Handling and storage

7.1. Precautions for safe handling
Keep out of reach of children. Do not take internally. Do not consume food, drink or smoke while handling this product.
See section 2 for further details. - [Prevention]:

Page 3 of 9
7.2. Conditions for safe storage, including any incompatibilities
Handle containers carefully to prevent damage and spillage.
Keep from freezing.
See section 2 for further details. - [Storage]:
7.3. Specific end use(s)
No data available.

8. Exposure controls and personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0009016-45-9</td>
<td>Nonylphenol polyethoxylate</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>0027176-87-0</td>
<td>Dodecylbenzenesulfonic acid.</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Respiratory: None required for normal use.
Eyes: None required for normal use.
Skin: Gloves: None required for normal use. Protective gloves recommended for prolonged direct contact.

Engineering Controls: Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

<table>
<thead>
<tr>
<th>9. Physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
</tr>
<tr>
<td><strong>pH</strong></td>
</tr>
<tr>
<td><strong>Melting point / freezing point</strong></td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
</tr>
<tr>
<td><strong>Evaporation rate (Ether = 1)</strong></td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Vapor pressure (Pa)</strong></td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
</tr>
<tr>
<td><strong>Solubility in Water</strong></td>
</tr>
<tr>
<td><strong>Partition coefficient n-octanol/water (Log Kow)</strong></td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
</tr>
<tr>
<td><strong>Viscosity (cSt)</strong></td>
</tr>
<tr>
<td><strong>VOC %</strong></td>
</tr>
<tr>
<td><strong>Density</strong></td>
</tr>
</tbody>
</table>

9.2. Other information
No other relevant information.
10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Freezing and extreme heat.

10.5. Incompatible materials

10.6. Hazardous decomposition products
No hazardous decomposition data available.

11. Toxicological information

Acute toxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LD50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LD50, mg/L/4hr</th>
<th>Inhalation Gas LD50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenol polyethoxylate - (9016-45-9)</td>
<td>2,000.00, Rat - Category: 4</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Dodecylbenzenesulfonic acid. - (27176-87-0)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
<th>Hazard Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>5</td>
<td>May be harmful if swallowed. (Not adopted by US OSHA)</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>5</td>
<td>May be harmful in contact with skin. (Not adopted by US OSHA)</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Safety Data Sheet
Kitchen Mate Dishwashing Detergent

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory sensitization</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>

12. Ecological information

12.1. Toxicity
The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenol polyethoxylate - (9016-45-9)</td>
<td>1.30, Lepomis macrochirus</td>
<td>4.80, Daphnia pulex</td>
<td></td>
</tr>
<tr>
<td>Dodecylbenzenesulfonic acid. - (27176-87-0)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This product contains PBT/vPvB chemicals.

12.6. Other adverse effects
No data available.
13. Disposal considerations

13.1. Waste treatment methods
Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

<table>
<thead>
<tr>
<th>DOT (Domestic Surface Transportation)</th>
<th>IMO / IMDG (Ocean Transportation)</th>
<th>ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>DOT Hazard Class: Not Regulated</td>
<td>IMDG: Not Regulated</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not Applicable</td>
<td>Air Class: Not Regulated</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>IMDG Marine Pollutant: No</td>
<td></td>
</tr>
</tbody>
</table>

14.6. Special precautions for user
No further information

15. Regulatory information

Regulatory Overview
The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA)
All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification
D2B E

US EPA Tier II Hazards
Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs (lbs):
Dodecylbenzenesulfonic acid (1,000.00)

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%):**
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Developmental Toxins (>0.0%):**
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**N.J. RTK Substances (>1%):**
- Dodecylbenzenesulfonic acid.

**Penn RTK Substances (>1%):**
- Dodecylbenzenesulfonic acid.

### 16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

- **H302** Harmful if swallowed.
- **H311** Toxic in contact with skin.
- **H314** Causes severe skin burns and eye damage.
- **H315** Causes skin irritation.
- **H318** Causes serious eye damage.
- **H319** Causes serious eye irritation.
- **H411** Toxic to aquatic life with long lasting effects.

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

IMPORTANT NOTE: This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Document