Section 1. Chemical product and company identification

Product name: TRI-STAR FLEXYLITE
Recommended use and restrictions: Laundry detergent
Use only for the purpose on the product label.

Product dilution information: Up to 3.07 oz/10 gal or 2.4 ml/L in water

Supplier's information:
Ecolab Inc. Institutional Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-352-5326

Code: 905222-02
Date of issue: 05 Apr 2013

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Hazards identification

GHS Classification:
- Product AS SOLD: SKIN CORROSION/IRRITATION - Category 1
- SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
- Product AT USE DILUTION: Not classified.

GHS label elements:
- Signal word: Danger
- No signal word.
- Symbol: ☢

Hazard statements:
- Causes severe skin burns and eye damage.
- No known significant effects or critical hazards.

Precautionary statements:

Prevention:
- Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wash hands thoroughly after handling.
- Wash thoroughly after handling.

Response:
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
- Get medical attention if symptoms appear.
Section 2. Hazards identification

Storage: No other specific measures identified.
Disposal: See section 13 for waste disposal information.
Other hazards: None known.

Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Hazardous ingredients</th>
<th>Concentration Range (%)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture</td>
<td>TETRASODIUM EDTA</td>
<td>5 - 20</td>
<td>64-02-8</td>
</tr>
<tr>
<td></td>
<td>alcohols, c12-14-secondary, ethoxylated</td>
<td>1 - 5</td>
<td>84133-50-6</td>
</tr>
<tr>
<td></td>
<td>TRIETHANOLAMINE</td>
<td>1 - 5</td>
<td>102-71-6</td>
</tr>
</tbody>
</table>

Section 4. First aid measures

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Skin contact: Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately. Wash clothing before reuse.

Ingestion: Get medical attention immediately. Rinse mouth. Do not induce vomiting.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

See toxicological information (section 11)

Section 5. Fire-fighting measures

Product AS SOLD
Suitable fire extinguishing media: Use water spray, fog or foam.
Specific hazards arising from the chemical: No specific fire or explosion hazard.
Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides, metal oxide/oxides.
Section 5. Fire-fighting measures

Specific fire-fighting methods: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

<table>
<thead>
<tr>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal precautions</td>
<td>Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.</td>
</tr>
<tr>
<td>Environmental precautions</td>
<td>Avoid contact of spilled material and runoff with soil and surface waterways.</td>
</tr>
<tr>
<td>Methods for cleaning up</td>
<td>Follow company's spill procedures. Keep people away from spill. Put on appropriate personal protective equipment (see section 8). Absorb/neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Use a water rinse for final clean-up.</td>
</tr>
</tbody>
</table>

Section 7. Handling and storage

<table>
<thead>
<tr>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling</td>
<td>Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Wash thoroughly after handling.</td>
</tr>
<tr>
<td>Storage</td>
<td>Keep out of reach of children. Keep container tightly closed. Store between the following temperatures: 0 and 50°C</td>
</tr>
</tbody>
</table>

Section 8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHANOLAMINE</td>
<td>ACGIH TLV (United States, 3/2012). TWA: 5 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appropriate engineering controls</th>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.</td>
<td>Good general ventilation should be sufficient to control worker exposure to airborne contaminants.</td>
</tr>
</tbody>
</table>
Section 8. Exposure controls/personal protection

**Personal protection**

**Eye protection**: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.

**Hand protection**: Use chemical-resistant, impervious gloves.

**Skin protection**: Use synthetic apron, other protective equipment as necessary to prevent skin contact.

**Respiratory protection**: A respirator is not needed under normal and intended conditions of product use.

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th><strong>Physical state</strong></th>
<th><strong>Product AS SOLD</strong></th>
<th><strong>Product AT USE DILUTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>slurry</td>
<td>Liquid.</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Red</td>
<td>Pale color</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Fragrance-like</td>
<td>Faint odor</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>12.7 to 13.5 (100%)</td>
<td>8.7 to 10</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>&gt; 100°C</td>
<td>&gt; 100°C</td>
</tr>
</tbody>
</table>

*Product does not support combustion.*

**Explosion limits**: Not available.

**Flammability (solid, gas)**: Not available.

**Melting point**: Not available.

**Boiling point**: >100°C (>212°F)

**Evaporation rate (butyl acetate = 1)**: Not available.

**Vapor pressure**: Not available.

**Vapor density**: Not available.

**Relative density**: 1.08 to 1.14 (Water = 1)

**Solubility**: Easily soluble in the following materials: hot water. Soluble in the following materials: cold water.

**Partition coefficient: n-octanol/water**: Not available.

**Auto-ignition temperature**: Not available.

**Decomposition temperature**: Not available.

**Odor threshold**: Not available.

**Viscosity**: Dynamic (room temperature): 325 mPa·s (325 cP)
Section 10. Stability and reactivity

Product AS SOLD

Stability : The product is stable.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid : No specific data.
Materials to avoid : Reactive or incompatible with the following materials: acids.
Slightly reactive or incompatible with the following materials: organic materials and metals.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Route of exposure : Skin contact, Eye contact, Inhalation, Ingestion

Symptoms

Eye contact : Adverse symptoms may include the following: pain, watering, redness
Skin contact : Adverse symptoms may include the following: pain or irritation, redness, blistering may occur
Inhalation : Adverse symptoms may include the following: coughing, Respiratory tract irritation
Ingestion : Adverse symptoms may include the following: stomach pains

Acute toxicity

Eye contact : Causes serious eye damage.
Skin contact : Causes severe burns.
Inhalation : May cause respiratory irritation.
Ingestion : May cause burns to mouth, throat and stomach.

Toxicity data

Product/ingredient name | LD50 Oral | Rat | LD50 Dermal | Rabbit | LD50 Oral | Rat | LD50 Dermal | Rabbit | LD50 Oral | Rat
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---
acetic acid, (ethylenedinitrilo)tetra- | 1700 mg/kg | 1700 mg/kg | 1700 mg/kg | 1700 mg/kg | 1700 mg/kg | 1700 mg/kg | 1700 mg/kg | 1700 mg/kg | 1700 mg/kg | 1700 mg/kg
triethanolamine | 6400 mg/kg | 6400 mg/kg | 6400 mg/kg | 6400 mg/kg | 6400 mg/kg | 6400 mg/kg | 6400 mg/kg | 6400 mg/kg | 6400 mg/kg | 6400 mg/kg
alcohols, c12-14-secondary, ethoxylated | >3000 mg/kg | >3000 mg/kg | >3000 mg/kg | >3000 mg/kg | >3000 mg/kg | >3000 mg/kg | >3000 mg/kg | >3000 mg/kg | >3000 mg/kg | >3000 mg/kg

Chronic toxicity

Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.
**Section 12. Ecological information**

**Product AS SOLD**

**Ecotoxicity**
No known significant effects or critical hazards.

**Aquatic and terrestrial toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt</td>
<td>Acute LC50 121 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>alcohols, c12-14-secondary, ethoxylated</td>
<td>Acute LC50 3.4 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>triethanolamine</td>
<td>Acute LC50 11800 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Section 13. Disposal considerations**

**Disposal methods**
Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.

**RCRA classification**
Unused product is D002 (Corrosive)

**Section 14. Transport information**

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

**DOT**

**DOT Classification**
Not regulated.

**IMO/IMDG**

**IMO/IMDG Classification**
Not regulated.

For transport in bulk, see shipping documents for specific transportation information.

**Section 15. Regulatory information**

**Product AS SOLD**

**U.S. Federal regulations**

**TSCA 8(b) inventory**
All components are listed or exempted.

**SARA 302/304/311/312 extremely hazardous substances**
No listed substance

**SARA 302/304 emergency planning and notification**
No listed substance

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form R - Reporting requirements</td>
<td>No listed substance</td>
<td></td>
</tr>
<tr>
<td>California Prop. 65</td>
<td>No listed substance</td>
<td></td>
</tr>
</tbody>
</table>
Section 16. Other information

Product AS SOLD

Hazardous Material : 
Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

National Fire Protection : 
Association (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability/Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability/Reactivity</th>
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<tbody>
<tr>
<td></td>
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Date of issue : 05 Apr 2013
Prepared by : Regulatory Affairs
1-800-352-5326

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