1. Identification

Product identifier: ZELEC 874

Other means of identification:
- **Product code**: 7212
- **Recommended use**: Surfactant
- **Recommended restrictions**: For industrial use only.

Manufacturer/Importer/Supplier/Distributor information

- **Company name**: Stepan Company
- **Address**: 22 West Frontage Road, Northfield, IL 60093, USA
- **Telephone**: General 1-847-446-7500, Medical 1-800-228-5635, Chemtrec 1-800-424-9300, Chemtrec Intl' +1 703-527-3887
- **E-mail**: Not available.

2. Hazard(s) identification

- **Physical hazards**: Not classified.
- **Health hazards**: Serious eye damage/eye irritation Category 2B
- **Environmental hazards**: Not classified.
- **OSHA defined hazards**: Not classified.

Label elements

- **Hazard symbol**: None.
- **Signal word**: Warning
- **Hazard statement**: Causes eye irritation.
- **Precautionary statement**:
  - **Prevention**: Wash thoroughly after handling.
  - **Response**: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
  - **Storage**: Store away from incompatible materials.
  - **Disposal**: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: Not applicable.

3. Composition/information on ingredients

Mixtures

- **Material name**: ZELEC 874
- **Material ID**: 2226
- **Product code**: 7212
- **Version #:**: 02
- **Revision date**: 05-04-2018
- **Print date**: 05-04-2018

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Pentaerythrityl</em></td>
<td>Tetracaprylate/Caprate</td>
<td>68441-68-9</td>
<td>90 - 100</td>
</tr>
</tbody>
</table>

4. First-aid measures

- **Inhalation**: Move to fresh air. Call a physician if symptoms develop or persist.
- **Skin contact**: Wash off with soap and water. Get medical attention if irritation develops and persists.
- **Eye contact**: Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
- **Ingestion**: Rinse mouth. Get medical attention if symptoms occur. Do not induce vomiting.
### 1. Most important symptoms/effects, acute and delayed
Direct contact with eyes may cause temporary irritation.

### 2. Indication of immediate medical attention and special treatment needed
Treat symptomatically.

### 3. General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire fighting equipment/instructions | Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | No unusual fire or explosion hazards noted. |

### 6. Accidental release measures

| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. |
| Methods and materials for containment and cleaning up | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. |
| | Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. |
| Environmental precautions | Never return spills to original containers for re-use. |

### 7. Handling and storage

| Precautions for safe handling | Avoid contact with skin. Observe good industrial hygiene practices. Wear appropriate personal protective equipment. |
| Conditions for safe storage, including any incompatibilities | Store in original tightly closed container. |

### 8. Exposure controls/personal protection

| Occupational exposure limits | This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit. |
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Appropriate engineering controls | Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower must be available when handling this product. |
| Individual protection measures, such as personal protective equipment | If contact is likely, safety glasses with side shields are recommended. |
| Eye/face protection | For prolonged or repeated skin contact use suitable protective gloves. |
| Skin protection | Wear suitable protective clothing. Wear protective gloves. |
| Hand protection | In case of insufficient ventilation, wear suitable respiratory equipment. |
| Other | Wear appropriate thermal protective clothing, when necessary. |
| Respiratory protection | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |
| Thermal hazards | General hygiene considerations |
9. Physical and chemical properties

Appearance
- Physical state: Liquid.
- Form: Liquid.
- Color: Light yellow.

Odor
- Odor threshold: Not available.
- pH: Not available.

Melting point/freezing point
- Not available.

Initial boiling point and boiling range
> 300 °F (> 148.89 °C)

Flash point
> 201.0 °F (> 93.9 °C) Pensky-Martens Closed Cup

Evaporation rate
- Not available.

Upper/lower flammability or explosive limits
- Flammability limit - lower (%): Not available.
- Flammability limit - upper (%): Not available.
- Explosive limit - lower (%): Not available.
- Explosive limit - upper (%): Not available.

Vapor pressure
- Not available.

Vapor density
- Not available.

Relative density
- Not available.

Solubility(ies)
- Solubility (water): Not available.

Auto-ignition temperature
- Not available.

Decomposition temperature
- Not available.

Viscosity
- 52 - 62 cSt @ 25C

Other information
- Density
8.01 lb/gal @ 25C

10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents. Alkalis.

Hazardous decomposition products
Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure
- Inhalation: No adverse effects due to inhalation are expected.
- Skin contact: Causes mild skin irritation.
- Eye contact: Causes eye irritation.
- Ingestion: Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics
Direct contact with eyes may cause temporary irritation. Mild skin irritation.
Acute toxicity

Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZELEC 874</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
Causes mild skin irritation.

**Serious eye damage/eye irritation**
Causes eye irritation.

**Respiratory or skin sensitization**

- **Respiratory sensitization**
  Not available.

- **Skin sensitization**
  This product is not expected to cause skin sensitization.

- **Germ cell mutagenicity**
  No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**IARC Monographs. Overall Evaluation of Carcinogenicity**
Not listed.

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**
Not listed.

**Reproductive toxicity**
This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**
Not applicable.

**Specific target organ toxicity - repeated exposure**
Not applicable.

**Aspiration hazard**
Not applicable.

**12. Ecological information**

**Ecotoxicity**
No ecotoxicity data noted for the ingredient(s).

**Persistence and degradability**
Expected to be readily biodegradable.

**Bioaccumulative potential**
No data available.

**Mobility in soil**
No data available.

**Other adverse effects**
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal instructions**
Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazardous waste code**
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

**DOT**
Not regulated as dangerous goods.

**IATA**
Not regulated as dangerous goods.

**IMDG**
Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes

Classified hazard categories
Serious eye damage or eye irritation

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
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<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory (NZIoC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Inventory (TCSI)</td>
<td>Yes</td>
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<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 02-18-2015
Revision date 05-04-2018
Version # 02
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Revision information
Identification: Recommended restrictions
Hazard(s) identification: Prevention
Hazard(s) identification: Response
Hazard(s) identification: Supplemental information
Physical & Chemical Properties: Multiple Properties
Regulatory information: California Proposition 65
Regulatory information: US federal regulations
Other information, including date of preparation or last revision: Disclaimer
HazReg Data: North America