1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name United 358 Machine Dishwashing Liquid Detergent

Other means of identification
SDS # UNITED-358
UN/ID No UN3266

Recommended use of the chemical and restrictions on use
Recommended Use Liquid dishwashing detergent.
Used Advised Against For industrial and institutional use only.

Details of the supplier of the safety data sheet
Supplier Address
United Laboratories, Inc.
320 37th Avenue
St. Charles, IL 60174
www.unitedlabsinc.com
www.unitedlabsinc.ca

Emergency Telephone Number
Company Phone Number 800-323-2594 (to reorder)
Emergency Telephone (24 hr) INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)

2. HAZARDS IDENTIFICATION

Appearance Green liquid Physical State Liquid Odor Light odor

Classification
Skin corrosion/irritation Category 1 Sub-category C
Serious eye damage/eye irritation Category 1

Signal Word
Danger

Hazard Statements
Causes severe skin burns and eye damage.
Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response
Immediately call a poison center or doctor/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 doctor/physician. If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. If swallowed: Rinse mouth. Do not induce vomiting.

Precautionary Statements - Storage
Store locked up.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Other Hazards
Harmful to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrapotassium pyrophosphate</td>
<td>7320-34-5</td>
<td>1-10</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>1310-58-3</td>
<td>1-10</td>
</tr>
<tr>
<td>Ethylenediaminetetraacetic acid, tetrasodium salt</td>
<td>64-02-8</td>
<td>1-10</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

General Advice
Immediately call a poison center or doctor/physician.

Eye Contact
Immediately flush with plenty of water for up to 15 minutes. Immediately call a poison center or doctor/physician.

Skin Contact
Wash with soap and water. If symptoms develop, seek medical attention.

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Immediately call a poison center or doctor/physician.

Ingestion
Rinse mouth. Do not induce vomiting. If conscious, give several glasses of water to dilute. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms and effects

Symptoms
Causes severe skin burns and eye damage.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water. Dry chemical. Carbon dioxide (CO2).
Unsuitable Extinguishing Media  No information available.

Specific Hazards Arising from the Chemical
None known.

Hazardous Combustion Products  When strongly heated, as in a fire, this product may produce oxides of carbon.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. All containers should be cooled with water to prevent vapor pressure build up.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions  Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for Containment  Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up  Small spills: Flush up to one quart to sanitary drain; Rinse area thoroughly. Large spills: Soak up with an inert absorbent and place in designated disposal container. Rinse area thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling  Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions  Store locked up. Keep containers tightly closed when not in use. Store in a cool, dry, well-ventilated place. Protect from freezing.

Incompatible Materials  Strong oxidizing agents such as bleach. Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide</td>
<td>Ceiling: 2 mg/m³</td>
<td>(vacated) Ceiling: 2 mg/m³</td>
<td>Ceiling: 2 mg/m³</td>
</tr>
<tr>
<td>1310-58-3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls  Normally not required.

Individual protection measures, such as personal protective equipment

Eye/Face Protection  Chemical safety goggles are recommended.

Skin and Body Protection  Chemical resistant gloves are recommended.
Respiratory Protection

Normally not required.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Green liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Green</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Light odor</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>13-14</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>100 °C / 212 °F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid-Not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.082</td>
<td>(Water = 1)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>VOC Content</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

## 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to Avoid

Excessive heat and fire. Incompatible Materials.

Incompatible Materials

Strong oxidizing agents such as bleach. Acids.

Hazardous Decomposition Products

When strongly heated, as in a fire, this product may produce oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Product Information

Eye Contact: Causes severe eye damage.

Skin Contact: Causes severe skin burns.

Inhalation: Do not inhale.

Ingestion: Do not ingest.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrapotassium pyrophosphate 7320-34-5</td>
<td>-</td>
<td>&gt; 4640 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Potassium hydroxide 1310-58-3</td>
<td>214 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ethylenediaminetetraacetic acid, tetrasodium salt 64-02-8</td>
<td>10 g/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms: Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No information available.

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging: Disposal should be in accordance with applicable regional, national and local laws and regulations.
California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide</td>
<td>Toxic</td>
</tr>
<tr>
<td>1310-58-3</td>
<td>Corrosive</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances. Per the DOT in 49 CFR 173.154 for corrosive in packing group III in 1 gallon bottles not over 5 liters, it can be renamed Consumer commodity ORM-D until December 31, 2020 shipping on the ground.

**DOT**

- **UN/ID No**: UN3266
- **Proper Shipping Name**: Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)
- **Hazard Class**: 8
- **Packing Group**: III

**IATA**

- **UN/ID No**: UN3266
- **Proper Shipping Name**: Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)
- **Hazard Class**: 8
- **Packing Group**: III

**IMDG**

- **UN/ID No**: UN3266
- **Proper Shipping Name**: Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)
- **Hazard Class**: 8
- **Packing Group**: III
- **Marine Pollutant**: This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

**International Inventories**

**TSCA**

- **Listed**

Legend:

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**US Federal Regulations**

**CERCLA**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td>1310-58-3</td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

**SARA 313**

**CWA (Clean Water Act)**

<table>
<thead>
<tr>
<th>Component</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
</table>

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US State Regulations

California Proposition 65
This product does not contain Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide 1310-58-3</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazards</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>N+P+T</td>
</tr>
</tbody>
</table>

Issue Date: 11-Sep-2015
Revision Date: 15-Oct-2018
Revision Note: Regulatory Update

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet