1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name United 217 Non-Fuming Cleaner And Descaler
Other means of identification
SDS # UNITED-217
UN/ID No UN3264
Recommended use of the chemical and restrictions on use.
Recommended Use Non-fuming cleaner and descaler.
Uses Advised Against For industrial or 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 Yellow liquid
Physical State Liquid
Odor Little to no odor
Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1 Sub-category B</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Hazards Not Otherwise Classified (HNOC)
May be harmful if swallowed. May be harmful in contact with skin.

Signal Word
Danger

Hazard Statements
Harmful if inhaled. Causes severe skin burns and eye damage.
Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. 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
Toxic 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>Phosphoric Acid</td>
<td>7664-38-2</td>
<td>70-80</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**
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.

**Skin Contact**
Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

**Ingestion**
Rinse mouth. Do not induce vomiting.

**Most important symptoms and effects**

**Symptoms**
May be harmful if swallowed. May be harmful in contact with skin. Harmful if inhaled. 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, CO2, Dry Chemical, Foam.

Unsuitable Extinguishing Media
No information available.

Specific Hazards Arising from the Chemical
In the presence of extreme heat, as in a fire, this product may react with active metals (e.g. aluminum, zinc, etc.) to release flammable hydrogen gas.

Hazardous Combustion Products
When strongly heated, as in a fire, this product may decompose to phosphoric oxide fumes and acid mist.

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. Containers should be cooled with water spray or mist 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: Soak up with an inert absorbent (e.g. clay, saw dust) and place in designated disposal container. Wash area thoroughly.

Large spills: Contain material and soak up with an inert absorbent and place in designated disposal container. Wash 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. Use only outdoors or in a well-ventilated area. 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.

Incompatible Materials
Oxidizing agents. Bases.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV (STEL)</th>
<th>OSHA PEL (TWA)</th>
<th>NIOSH IDLH (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid 7664-38-2</td>
<td>3 mg/m³</td>
<td>1 mg/m³</td>
<td>1000 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Mechanical ventilation recommended when handling in enclosed, tight spaces.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Safety goggles are recommended.

Skin and Body Protection
Chemical resistant gloves are recommended.

Respiratory Protection
NIOSH/OSHA approved respirator for acid mist/gas.

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>Yellow liquid</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Little to no odor</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>17.5 °C / -5 °F</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>No information available.</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>5.65 mmHg</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.36</td>
<td>(Water = 1)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble in water</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
None under normal processing.

Conditions to Avoid
Incompatible Materials.

Incompatible Materials
Oxidizing agents. Bases.

Hazardous Decomposition Products
When strongly heated, as in a fire, this product may decompose to phosphoric oxide fumes and acid mist.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation Harmful if inhaled.

Ingestion May be harmful if swallowed.

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>Phosphoric Acid</td>
<td>1530 mg/kg (Rat)</td>
<td>2740 mg/kg (Rabbit)</td>
<td>&gt; 850 mg/m³ (Rat) 1 h</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 Based on the information provided, 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.
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>Phosphoric Acid 7664-38-2</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 DOT in 49 CFR 173.54 for corrosive in packing group II in quart bottles not over 1.0L, it can be renamed Consumer Commodity ORM-D until December 31, 2020 shipping on the ground.

DOT

UN/ID No
UN3264

Proper Shipping Name
Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)

Hazard Class
8

Packing Group
II

IATA

UN/ID No
UN3264

Proper Shipping Name
Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)

Hazard Class
8

Packing Group
II

IMDG

UN/ID No
UN3264

Proper Shipping Name
Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)

Hazard Class
8

Packing Group
II

Marine Pollutant
This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
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>Phosphoric Acid</td>
<td>5000 lb</td>
<td>RQ 5000 lb final RQ</td>
<td></td>
</tr>
<tr>
<td>7664-38-2</td>
<td></td>
<td>RQ 2270 kg final RQ</td>
<td></td>
</tr>
</tbody>
</table>

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>5000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7664-38-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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>Phosphoric Acid</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7664-38-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NFPA

<table>
<thead>
<tr>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

HMIS

<table>
<thead>
<tr>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>N+P</td>
</tr>
</tbody>
</table>

Issue Date: 05-Nov-2011
Revision Date: 16-Dec-2015
Revision Note: New format

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