

Issue Date: 16-Jan-2015

Revision Date: 10-Oct-2016

Version 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name United 417 Descaler

Other means of identification

SDS # UNITED-417

UN/ID No UN3264

Recommended use of the chemical and restrictions on use

Recommended Use Descaler for Steam Boilers.

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 Pink liquid

Physical State Liquid

Odor Little to no odor

Classification

| | |
|---|---------------------------|
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |

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

| Chemical Name | CAS No | Weight-% |
|-----------------|-----------|----------|
| Phosphoric Acid | 7664-38-2 | 70-80 |

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**

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------------------|---|---|---|
| Phosphoric Acid 7664-38-2 | STEL: 3 mg/m ³ TWA: 1 mg/m ³ | TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ (vacated) STEL: 3 mg/m ³ | IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³ |

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**

| | | | |
|-----------------------|-------------|-------------|-------------------|
| Physical State | Liquid | Odor | Little to no odor |
| Appearance | Pink liquid | | |
| Color | Pink | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------------------|---------------------------|--------------------------------|
| pH | 1-2 | |
| Melting Point/Freezing Point | -17.5 °C / -5 °F | |
| Boiling Point/Boiling Range | 100 °C / 212 °F | |
| Flash Point | None | |
| Evaporation Rate | No information available. | |
| Flammability (Solid, Gas) | Liquid-Not applicable | |
| Upper Flammability Limits | No information available. | |
| Lower Flammability Limit | No information available. | |
| Vapor Pressure | 5.65 mmHg | |
| Vapor Density | No information available. | |
| Specific Gravity | 1.36 | (Water = 1) |
| Water Solubility | Soluble in water | |
| Solubility in other solvents | No information available. | |
| Partition Coefficient | No information available. | |
| Auto-ignition Temperature | No information available. | |
| Decomposition Temperature | No information available. | |
| Kinematic Viscosity | No information available. | |
| Dynamic Viscosity | No information available. | |
| Explosive Properties | No information available. | |
| Oxidizing Properties | No information available. | |
| VOC Content | None | |

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**

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------------------|--------------------|-----------------------|-------------------------------------|
| Phosphoric Acid 7664-38-2 | 1530 mg/kg (Rat) | 2740 mg/kg (Rabbit) | > 850 mg/m ³ (Rat) 1 h |

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.

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

| Chemical Name | California Hazardous Waste Status |
|------------------------------|-----------------------------------|
| Phosphoric Acid 7664-38-2 | Corrosive |

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

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|-----------------|---------|-----|------|---------|--------|---------|-------|---------|-------|------|
| Phosphoric Acid | Present | X | | Present | | Present | X | Present | X | X |

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*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|------------------------------|--------------------------|----------------|--|
| Phosphoric Acid 7664-38-2 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |

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)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|-----------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Phosphoric Acid | 5000 lb | | | X |

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

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| Phosphoric Acid 7664-38-2 | X | X | X |

16. OTHER INFORMATION

| | | | | |
|-------------|--------------------------|--------------------------|--------------------------|----------------------------|
| NFPA | Health Hazards | Flammability | Instability | Special Hazards |
| | No information available | No information available | No information available | No information available |
| HMIS | Health Hazards | Flammability | Physical Hazards | Personal Protection |
| | 2 | 0 | 0 | N+P |

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 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