1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name
United 482 O₂ PLUS

Other means of identification
SDS #
UNITED-482

UN/ID No
UN1457

Recommended use of the chemical and restrictions on use
Recommended Use
Water Soluble Packets

Uses 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

Classification
OSHA Regulatory Status-This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>Serious eye damage/eye irritation</th>
<th>Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxidizing Solids</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Signal Word
Danger

Hazard Statements
Causes serious eye damage. May intensify fire; oxidizer.

Precautionary Statements – Prevention
Wear eye protection/face protection. Take any precaution to avoid mixing with combustible. Keep away from heat/sparks/ open flames/hot surfaces. No smoking. Keep/store away from clothing/combustible materials.
Precautionary Statements - Response
In case of fire: use water to extinguish. 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.

Precautionary Statements - Storage
Store in accordance with local, national and regional rules, laws and regulations.

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

Hazards not otherwise classified
No hazards not otherwise classified were identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium hydroxide</td>
<td>1305-62-0</td>
<td>&lt;25</td>
</tr>
<tr>
<td>Calcium peroxide</td>
<td>1305-79-9</td>
<td>&gt;75</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

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids intermittently. Consult a physician.

Skin Contact
Wash off with soap and water. Get medical attention if irritation develops and persists.

Inhalation
Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If breathing difficulty or discomfort occurs and persists, obtain medical attention.

Ingestion
Rinse mouth with water and afterwards drink plenty of water or milk. Do not induce vomiting or give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment advice. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms
Corneal lesions are irreversible damage if contact with the eyes.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Flood with water.

Unsuitable Extinguishing Media
Dry chemical. Foam.

Specific Hazards Arising from the Chemical
Decomposes under fire conditions to release oxygen that intensifies the fire.
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. Move containers from fire area if you can do without risk.

Explosion data

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions
Avoid contact with the skin and the eyes. Avoid dust formation. Ensure adequate ventilation. For personal protection, see Section 8.

Environmental Precautions
Prevent material from entering into soil, ditches, sewers, waterways, and/or groundwater. See Section 12, for more detailed information.

Methods and material for containment and cleaning up

Methods for Containment
Vacuum or shovel waste into a drum and label contents for disposal. Do not return product to the original storage container/tank due to risk of decomposition. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Methods for Clean-Up
After cleaning, flush away traces of water. Do not flush powdered material to sewer; Runoff to sewer may create fire or explosion hazard.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Avoid contact with skin and eyes. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment if release of airborne dust is expected. If compounded with organics or combustible materials to be sure to exclude moisture.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep tightly closed in a dry and cool place. Keep away from heat and sources of ignition i.e., steam pipes, radiant heaters, hot air vents or welding sparks. Reacts with moisture. Keep container tightly closed.

Incompatible Materials
Heavy metals. Combustible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Hydroxide</td>
<td>TWA: 5 mg/m$^3$</td>
<td>TWA: 15 mg/m$^3$</td>
<td>TWA: 5 mg/m$^3$</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/ Face Protection
For dust, splash, mist or spray exposure, wear chemical protective goggles.
Skin and Body Protection: Wear suitable protective clothing. Protective shoes or boots. Rubber/latex/neoprene or other suitable chemical resistant gloves. Wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

Respiratory Protection: For dust, splash, mist or spray exposures, wear a filtering mask.

Hygiene measures: Clean water, preferably an eyewash station and a safety shower, should be available for washing in case of eye or skin contamination. Handle in accordance with good industrial hygiene and safety practice.

General Information: Handle in accordance with good industrial and safety practices. These recommendations apply to the product as supplied.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
<td>Odorless</td>
<td>Odor Threshold</td>
</tr>
<tr>
<td>Appearance</td>
<td>Granules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>White to off white</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>10.5-11.8 @ 25°C</td>
<td>(1% solution)</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Decomposes on heating @~275°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not flammable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Substance does not burn but will support combustion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>2.92 g/cm³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Slightly soluble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Product is not self-ignitable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>275°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>No information available</td>
<td></td>
<td>(Solid)</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No information available</td>
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<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Strong oxidizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>72.8 (CaO2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>45 lb/cu ft (loose)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity:
Strong oxidizer.

Chemical Stability:
Stable under recommended storage conditions. Decomposition can occur on exposure to heat or moisture.

Possibility of Hazardous Reactions:
Oxidizable material can be ignited by grinding and may become expensive.

Conditions to Avoid:
Incompatible Materials
Heavy metals. Combustible materials.

Hazardous Decomposition Products
Oxygen which supports combustion. Calcium oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Eye Contact Corrosive. Risk of serious damage to eyes.
Skin Contact May cause skin irritation in susceptible persons. Non-irritating (rabbit).
Sensitization No information available.
Ingestion Do not ingest.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Oral LD$_{50}$</th>
<th>Dermal LD$_{50}$</th>
<th>Inhalation LC$_{50}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Information</td>
<td>&gt;5g/kg</td>
<td>&gt;10g/kg</td>
<td>&gt;17mg/L 1 hr. (Rat)</td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms Dust is irritating to eyes, nose, throat and lungs.

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

Carcinogenicity There are no known carcinogenic chemicals in this product.
Chronic toxicity No known effect.
Mutagenicity This product is not recognized as mutagenic.
Reproductive toxicity This product is not recognized as a reproductive toxicity.
Aspiration hazard No information available.
STOT-single/repeated exposure No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity The environmental impact of this product has not been fully investigated.

Persistence/Degradability Biodegradability does not pertain to inorganic substances.

Bioaccumulation Does not bioaccumulate.

Mobility No information available.

Other Adverse Effects None known.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods
Disposal of Wastes

This material, as supplied, is a hazardous waste according to federal regulations (40CFR261). Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Empty remaining contents. Empty containers should be disposed of in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

D001

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>UN1457</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>Calcium Peroxide</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>5.1</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
</tbody>
</table>

IATA

Oxidizers are prohibited from aircraft.

IMDG

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>UN1457</th>
</tr>
</thead>
<tbody>
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<td>5.1</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL (Canada)</th>
<th>EINECS/EL (Europe)</th>
<th>ENCS (Japan)</th>
<th>China (IECSC)</th>
<th>KECL (Korea)</th>
<th>PICCS (Philippines)</th>
<th>AICS (Australia)</th>
<th>NZIoC (New Zealand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Peroxide 1305-79-9</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Calcium Hydroxide 1305-62-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

US Federal Regulations

Clear Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40CFR122.21 and 40CFR122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40CFR302) or the Superfund Amendments and Reauthorization Act (SARA) (40CFR355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.
SARA 311/312
Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden release of pressure hazard No
Reactive hazard No

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 of Title 40 of the Code of Federal Regulations, Part 372.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Stability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>OX</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>J</td>
</tr>
</tbody>
</table>

Issue Date: 19-Sep-2013
Revision Date: 10-Dec-2016
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 a 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