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Revision Date: 10-Dec-2016

Version 2

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).

Serious eye damage/eye irritation	Category 1
Oxidizing Solids	Category 2

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 combustibles. 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

Chemical Name	CAS No	Weight-%
Calcium hydroxide	1305-62-0	<25
Calcium peroxide	1305-79-9	>75

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.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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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

Sensitivity to Mechanical Impact-Not sensitive. Sensitivity to Static Discharge-Not sensitive.

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

Chemical Name	ACGIH	OSHA	NIOSH
Calcium Hydroxide 1305-62-0	TWA: 5 mg/m ³	TWA: 15 mg/m ³ TWA: 5 mg/m ³	TWA: 5mg/m ³

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

Physical State	Solid	Odor	Odorless
Appearance	Granules	Odor Threshold	Not determined
Color	White to off white		
Property	Values	Remarks • Method	
pH	10.5-11.8 @ 25°C	(1% solution)	
Melting Point/Freezing Point	Decomposes on heating @ ~275°C		
Boiling Point/Boiling Range	Not information available		
Flash Point	Not flammable		
Evaporation Rate	No information available		
Flammability (Solid, Gas)	Substance does not burn but will support combustion		
Upper Flammability Limits	Not applicable		
Lower Flammability Limit	Not applicable		
Vapor Pressure	No information available		
Vapor Density	No information available		
Specific Gravity	2.92		
Density	2.92 g/cm ³		
Water Solubility	Slightly soluble		
Solubility in other solvents	No information available		
Partition Coefficient	No information available		
Auto-ignition Temperature	Product is not self-ignitable		
Decomposition Temperature	275°C		
Kinematic Viscosity	No information available (Solid)		
Explosive Properties	No information available		
Oxidizing Properties	Strong oxidizer		
Molecular weight	72.8 (CaO ₂)		
Bulk density	45 lb/cu ft (loose)		

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 explosive.

Conditions to Avoid

Heat (decomposes at 275°C). Humid air. Grinding with organics.

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.

Chemical	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
Product Information	>5g/kg (Rat)	>10g/kg (Rat)	>17mg/L 1 hr. (Rat)

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
UN/ID No UN1457
Proper Shipping Name Calcium Peroxide
Hazard Class 5.1
Packing Group II

IATA Oxidizers are prohibited from aircraft.

IMDG
UN/ID No UN1457
Proper Shipping Name Calcium Peroxide
Hazard Class 5.1
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL (Canada)	EINECS/EL INCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)	NZIoC (New Zealand)
Calcium Peroxide 1305-79-9	X	X	X	X	X	X	X	X	X
Calcium Hydroxide 1305-62-0	X	X	X	X	X	X	X	X	X

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

<u>NFPA</u>	Health Hazards 2	Flammability 0	Stability 1	Special Hazards OX
<u>HMIS</u>	Health Hazards 2	Flammability 0	Reactivity 0	Personal Protection J

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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 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