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## PermeOx® Plus

### Calcium Peroxide (CAS NO 1305-79-9)

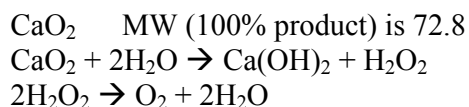
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#### Introduction

PermeOx® Plus is an economical, viable and effective alternative oxygen-generating compound for use in odor control, metals removal and bioremediation. PermeOx Plus® peroxide is a passive, in-situ approach to providing an oxygen source for bioremediation. Successful bioremediation depends on proper mix of nutrient, oxygen, and microbes. Often the limiting factor of aerobic degradation of contaminants is oxygen availability. PermeOx Plus® peroxide releases oxygen so that indigenous aerobic microbes may degrade organic containments.

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#### Formula



#### Description

White granular material  
One pound of CaO<sub>2</sub> yields 3 liters of O<sub>2</sub>

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#### Specifications

Calcium peroxide, %	75.0 % min
Active Oxygen, %	18.2 % min

Typical application rates are 2 to 6 pound/cubic yard soil

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#### Uses

Bioremediation - hazardous wastes into soil/sludge composting  
Petroleum hydrocarbon remediation  
Wastewater Treatment Plant Odor Control  
Creosote remediation  
Partially halogenated hydrocarbon remediation

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#### Typical Properties

Solubility	Practically insoluble in water	Soluble in acid
pH of a 1% slurry at 25° C, approximate	11.5 to 12.2	
Loose Bulk Density, approximate lb/cu ft	45-65	
Odor/Appearance	None/Yellow/White Powder	

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#### Standard Containers

Plastic Pails	5-gallon containers
Fiber Drums, polyethylene lined	100 lbs (45.25 kg)
IBC-Polypropylene sack, polyethylene lined	2000 lbs (905 kg)

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### **Shipping**

PermeOx Plus® 75% to 80% is shipped in the above standard containers. It is classified by DOT as “Oxidizer – 5.1” and containers carry the yellow oxidizer label.

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### **Safety/Handling/Storage**

Calcium peroxide is among the safest to handle of peroxide compounds. It represents no significant hazards with regards to skin contact, inhalation, or ingestion. Airborne dust is irritating to eyes, nose, throat, and lungs. Calcium peroxide should be handled in well ventilated, dust controlled areas. When handling large quantities, the use of dust mask, goggles, and gloves is recommended.

Calcium peroxide is an oxidizer, thus contact with combustible materials (paper, cotton, organics, wood, leather, reducing agents, and other oxidizers) should be avoided. Calcium peroxide is not flammable but will contribute oxygen to feed a fire. Contamination, heat, and humid conditions will enhance and accelerate decomposition. Fires involving calcium peroxide are best controlled by using large quantities of water. However, unlike most oxidizers, decomposition is endothermic.

Calcium peroxide should be stored in a clean, dry place. Do not expose to heat sources or high humidity. Store away from combustible materials. Keep containers closed when not in use. Handle spills by dilution with water. (Refer to MSDS for more detailed information)

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### **Customer Service**

To place orders, or obtain general information, please call our Regional Distributor:

**Panther Technologies, Inc.  
220 Route 70 East, Suite B  
Medford, NJ 08055  
Tel (609) 714-2420**

For technical assistance, please call one of the offices below:

#### **Applications and Chemistry of Peroxygens**

FMC Research and Development Center  
Hydrogen Peroxide Division  
Princeton, NJ 08543 (866) 860-4760

#### **Systems for Storage and Handling**

FMC Technical Services and Engineering  
Tonawanda, NY 14240  
(716) 876-8306

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