

FMC Corporation
Chemical Products Group
Environmental Business
1735 Market Street
Philadelphia, PA 19103
Phone: 1-866-860-4760



Visit our E-Commerce Site at
<http://www.fmcchemicals.com>

PermeOx[®] Plus

CAS NO 1305-79-9

Introduction

PermeOx[®] Plus is an economical, viable and effective oxygen-generating compound for use in odor control, metals removal and bio-remediation. PermeOx[®] Plus is a passive, in situ approach to providing an oxygen source for bio-remediation. Successful bio-remediation depends on proper mix of nutrient, oxygen, and microbes. Often the limiting factor of aerobic degradation of contaminants is oxygen availability. PermeOx[®] Plus is designed for slow releases of oxygen over the pH range of 4 to 9 so that indigenous aerobic microbes may utilize the organic containments as a source of nutrient.

Formula

CaO₂

MW 72

Description Off white granular solid

Specifications

| | |
|------------------------|--------|
| Calcium Peroxide, wt% | 75 min |
| Active Oxygen, wt% | 16 min |
| Other Ingredients, wt% | 25 max |

Uses

Bioremediation
Petroleum hydrocarbon remediation
Creosote remediation
Partially halogenated hydrocarbon remediation

Typical Properties

| | |
|---|---|
| Solubility | Slightly soluble in water Soluble in acid |
| pH of a 1% slurry at 25 degrees C., approximate | 11.4-12.5 |
| Loose Bulk Density, approximate lb/cu ft | 27 |
| Color | Off white |
| Odor | None |
| Reaction: | $\text{CaO}_2 + 2\text{H}_2\text{O} \rightarrow \text{Ca(OH)}_2 + \frac{1}{2}\text{O}_2 + \text{H}_2\text{O}$ |

Standard Containers

NOTICE

The information contained herein is, to our knowledge, true, and accurate. However, we make no warranty or representation, expressed or implied, except that FMC products discussed herein conform to the chemical description shown on their labels. Nothing contained herein shall be construed as permission or recommendation to infringe any patent. No agent, representative or employee of this company is authorized to vary any of the terms of this notice.

FMC Corporation
Chemical Products Group
Environmental Business
1735 Market Street
Philadelphia, PA 19103
Phone: 1-866-860-4760



Visit our E-Commerce Site at
<http://www.fmcchemicals.com>

Fiber Drums, polyethylene lined

100 lbs (45.25 kg)

Shipping

PermeOx[®] Plus is shipped in the above standard containers. It is classified by DOT as "Oxidizer - 5.1" and containers carry the yellow oxidizer label.

Safety/Handling/Storage

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

PermeOx[®] Plus is an oxidizer, thus contact with combustible materials (paper, cotton, organics, wood, leather, reducing agents, and other oxidizers) should be avoided.

PermeOx[®] Plus 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.

PermeOx[®] Plus 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 the MSDS for more detailed information)

Customer Service

To place orders, request samples or obtain general information, please call the marketing office or visit our website at www.fmcchemicals.com

FMC Corporation
Active Oxidants Division, Environmental Business
1735 Market Street
Philadelphia, PA 19103
Tel 866-860-4760

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

Applications and Chemistry of Peroxygens

FMC Research and Development Center
Chemical Products Group
Princeton, NJ 08543
(609) 951-3657

Systems for Storage and Handling

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

NOTICE

The information contained herein is, to our knowledge, true, and accurate. However, we make no warranty or representation, expressed or implied, except that FMC products discussed herein conform to the chemical description shown on their labels. Nothing contained herein shall be construed as permission or recommendation to infringe any patent. No agent, representative or employee of this company is authorized to vary any of the terms of this notice.