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TECHNICAL DATA SHEET 产品规格单

Calcium Peroxide

Description

Calcium peroxide is a white or yellowish solid peroxide which slowly decomposes to release oxygen at a "controlled" rate when in contact of hydrous media. Calcium peroxide is of the most temperature stable inorganic peroxides. It decomposes slowly in moist air, is practically insoluble in water, and dissolves in acids, forming hydrogen peroxide. A 1:100 aqueous slurry has a pH of about 12. Except for its stable oxygen releasing capability, calcium peroxide has similar functions of other peroxides e.g. bleaching, disinfecting, deodorizing. Calcium peroxide is environmentally friendly due to its product properties.

Technical Information

- Chemical Name: Calcium Peroxide
- Molecular Formula: CaO2
- Molecular Weight: 72.08
- CAS Number: 1305-79-9

Product Properties	**Standard Specifications**
Composition	CaO_2, CaO, $Ca(OH)_2$
Calcium Peroxide, %	Min.75
Available Oxygen, %	Min.16.6
Particle Size Distribution, %	Through 200 mesh Min.99%
	Through 325 mesh Min.50%
Bulk Density, g/L	500-650
Lead, %	Max 0.001
Moisture, %	Max. 2.0
PH	Approx.12
Appearance	White or yellowish fine powder
Packing	25kgs in Kraft paper bags plus PE liner, or in fiber drums

Applications

Calcium peroxide is an ecologically pure substance, which can be used in different fields of industry and agriculture.

In environmental protection it is used:

- For decontaminating soil
- Bioremediation of contaminated soil and groundwater.

In Oil/Gas Drilling Service:

- Used as breaker for Hydranlic Fracturing Fluid

In bakery industry it is used:

- Dough conditioner to improve bread crumb and its porosity;
- to keep moisture in dough during its baking;
- to initiate yeast growth.

In agriculture it is used:

- as fertilizing rich with oxygen;
- for stimulating seed growth and their germinating power;
- for presowing treatment of rice seed, which allows to do planting not by seedlings, but by dry seeds, coated with calcium peroxide. Such a technique sufficiently decreases work expenditure and increases crop capacity.
- to provide sufficient dissolved oxygen;
- to adjust pH value;
- to reduce the subaqueous content of ammonium and nitrogen;
- to eliminate carbon dioxide and sulfureted hydrogen;
- to prevent anaerobe from proliferation and killing nosogenetic bacteria, defecating aqueous body;

In poultry-raising it is used:

- to decontamination of fodder;
- to increase productivity, hens safety and improving their eggs.

In cattle-breeding it is used:

- for prophylaxis of casein-stone formation in the abomasum and diarrhoea with newborn calves;
- as an antimicrobic effect;
- for stimulating protective organism strength;
- for normalizing activity of the alimentary canal;
- for activizing digestion work;
- for great increasing live-stock safety.

In precious metal production it is used:

- for leaching precious metals in the formation of cyano complexes (particularly complexes with gold and/or silver) from ores, ore concentrates, and other particle-shaped, solid materials.

In dental care it is used:

- for tooth bleaching

Handling and Storage

Storage

- Oxidizer. Store in a cool, well ventilated area away from all source of ignition and out of direct sunlight. Store in a dry location away from heat.
- Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers.
- Protect from moisture. Do not store near combustible materials. Keep containers well sealed, seal only with original vent cap. Ensure pressure relief and adequate ventilation.
- Store separately from organics and reducing materials. Avoid contamination which may lead to decomposition.

Handling

- Avoid contact with eyes, skin, and clothing. Use with adequate ventilation.

- Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area.
- Prevent contact with combustible or organic materials.
- Label containers and keep them tightly closed when not in use.
- Wash thoroughly after handling.

First-aid Measures

- **Inhalation -** Remove affected person to fresh air. Seek medical attention if effects persist.
- **Eye contact -** Flush eyes with running water for at least 15 minutes with eyelids held open. Seek specialist advice.
- **Skin contact -** Wash affected skin with soap and mild detergent and large amounts of water.
- **Ingestion -** If the person is conscious and not convulsing, give 2-4 cupfuls of water to dilute the chemical and seek medical attention immediately. Do not inducing vomiting.

Shipping Information

- Proper Shipping Name: Calcium Peroxide
- UN Number: UN1457
- Hazard Class: 5.1
- Labels: 5.1 (Oxidizer)
- Packing Group: II

Please read the MSDS for this chemical before using