

Main Category: Minerals

Hydrated Lime



Calcium Hydroxide or Hydrated Lime, traditionally called slaked lime, is an inorganic compound with the chemical formula $\text{Ca}(\text{OH})_2$. It is a colorless crystal or white powder and is obtained when calcium oxide is mixed, or “slaked” with water. It has many names including hydrated lime, slack lime . Calcium hydroxide is used in many applications.

Application of Hydrated Lime:



Steel

- ⊗ Sugar
- ⊗ Cement
- ⊗ Paper
- ⊗ Pharmaceuticals
- ⊗ Paints
- ⊗ Water Treatment/ Effluent Treatment
- ⊗ Leather Tanneries
- ⊗ Bleaching
- ⊗ Chemicals

Applications of lime products in above industries is widespread, from purifying the water we drink to the air we breathe it is used as a cleaning agent for the environment that we live in.

Some of industrial uses of Hydrated Lime are:

- ⊗ Manufacturing of Bleaching Powder.
- ⊗ Process Water Demineralization
- ⊗ Waste Water Neutralization.
- ⊗ Neutralization of Acidic effluents
- ⊗ Fluxing or Clarifying.
- ⊗ Drying of mud or sludge.

- ⊗ Stabilization of hazardous waste.
- ⊗ Flue gas Desulphurization
- ⊗ Calcium Hypochlorite Bleaching of Paper pulp.

Specifications:

Specification	93%	90%	85%	80%	75%	70%
Apperance	Brilliant white	Snow white	White	White	White	White
Av. Ca(OH) ₂	93.0 ± 0.50	90.0 ± 0.50	+ 85.0	+80.0	+75.0	+70.0
Moisture %	0.50 ± 0.20	0.70 ± 0.20	0.40 ± 0.15	0.40 ± 0.15	0.25	0.30
Magnesium (Mgo)	0.70 ± 0.20	0.80 ± 0.20	0.90 ± 0.30	1.05 ± 0.40	1.80 ± 0.50	2.90
Acid Insoluble As (SiO) ₂	0.20 ± 0.05	0.50 ± 0.05	1.25 ± 0.20	1.5 ± 0.20	5.0 ± 1.0	7.0
Particular size Mesh size	(BSS 300) (-) 98 %	(BSS 200) (-) 95 %	(BSS 200) (-) 90 %	(BSS 100) (-) 95 %	(BSS 100) (-) 95 %	(BSS 100) (-) 95 %

QuickLime



We are one of the biggest **Quick Lime (Burnt Lime)** manufacturers in India. The composition of the burnt lime makes it appear white in color and to meet the requirements of the application, the burnt lime is available in forms of lump & powder. The content burnt lime many vary from 90% to 80%. The burnt lime when reacts with water, it generates heat.

Features:

- Optimum quality
- Accurate composition
- Long shelf life

Specifications	Grade
% of lime as CaO	>85%
Acid Insoluble %	1.0 (max)
Magnesia as MgO %	2.5 (max.)
Metal Oxides as Fe ₂ O ₃ & Al ₂ O ₃ %	0.15(max.)
L.O.I (Loss on Ignition)%	5.0 to 7.0 (max.)
Reactivity (4N HCl)	400 ml
Brightness %	>80
Moisture %	0.5%
Sizes %	0 - 3 mm 0 - 10mm 10 - 50mm

Wide Applications of Quick Lime Products (Quick & Hydrated / Powder & Lumps)



Steel Industry

Steel plays one of the crucial roles in Automotive Industries, Constructions and country's economy and security. In steel manufacturing Industry Quick Lime acts as a flux in purifying steel. Lime is also used in metallurgical plants and refractory's thus making it integral to metal manufacturing.



Paper Industry

Lime is a primary raw material for paper and pulp industry. Both Quick Lime and Hydrated Lime are essentially required for the manufacturing of pulp and paper in order to enhance the quality of paper by maximizing its opacity.



Chemical Industry

Lime contributes to a great deal in the chemical industries. Our High grade Hydrated Lime is being used as major Raw Material of our Valued Customers and we are Proudly serving them.



Road Building

Lime is used in stabilizing the in-place soils or aggregate used in road building. Hydrated Lime helps in forming an impermeable base thereby reducing the chances of seepage of rainwater.



Leather Industry

Since time immemorial lime has been used for dehairing and plumping hides preparatory to leather tanning. A cleaning agent in the leather manufacture process, lime is used to remove raw skin and thus obtain clean leather.



Flue Gas Treatment

Lime is the key agent in the elimination of pollutants from fuel-gas streams of coal-fired power plants, incinerators and industrial facilities. It is used for treatment of flue gases before it is released to atmosphere.



Sugar Industry

Hydrated Lime and Quick Lime are essential to the production of sugar from both sugar cane and sugar beet. It is used for removal of dirt, puma and pH correction.



Dairy Industry

Lime is one of the alkalis employed to neutralize the acidity in the cream before pasteurization. Addition of lime in the fermented skimmed milk forms calcium lactate, which is marketed as a medicine or further acidified to manufacture lactic acid.



Paints & Pigment Industry

All precipitated calcium carbonate, widely employed as a paint pigment, is derived from lime. It is also used in manufacturing of cement paints and is used as filler as well.



Agricultural Uses

Lime is popularly used to increase the soil pH level and increase the crop yield. It is also used to improve the physical structure of the soil by reducing surface crusting. It is also used for soil liming, compost, disposal of animal products, fertilizers etc.



Lubricant

Used during Plastic extrusion as a lubricant in petroleum refining and also lubricating grease manufacturing process.



Glass Industry

Limestone and lime are the fluxing materials for glass. There is no substitute for liming materials in glass when color is important.



Construction Industry

As a building material lime is one of the oldest- probably only antedated by stone and mud. Lime has long been used in the construction industry to make mortar and plaster, serving as a binder in these substances. Hydraulic lime is used to make a special kind of mortar that hardens under water. Besides this, Quick Lime Powder is also used immensely for manufacturing AAC Blocks (Autoclaved Aerated Concrete).



Water Treatment

Lime is extensively used to treat municipal waste waters and industrial liquid wastes. In wastewater treatment plants (both urban and industrial) Hydrated Lime and Quick Lime are widely used for correcting the pH balance of acidic water, for precipitating heavy metals and phosphates, and for its flocculating action.

Lime is widely used for stabilizing industrial residual sludge or dredging sludge and for treating urban biosolids before agricultural re-use or incineration.

In addition, lime is used to treat soils polluted with hydrocarbons.



Pharmaceutical Industry

Lime is widely used in the manufacturing of most calcium- based pharmaceuticals.

CALCITE POWDER



Product Information:-

Calcite is the one of the most common minerals on earth. It occurs in a seemingly unlimited variety of shapes and colors. It constitutes a major portion of many of the earth's rocks. Calcite is a **natural calcium carbonate** containing 90-98% CaCO_3 with extremely high whiteness, purity & free flowing in nature. We use the latest tools and techniques to ensure the accurate composition and purity of Calcite Powder on different parameters. Our Calcite Powder is highly appreciated by clients for its free-flow structure and low moisture content Our grades of Calcite powder are available in 300 Mesh to 700 Mesh BSS standard & in Micronized grades, Our grades are available in top cut 5, 10, 15 & 20 Microns

Particle Size Availability	•Powder (100-700 Mesh & Upto 2 Micron)
Packing	•50 kg HDPE bags •Or as per customer requirements
Applications	<ul style="list-style-type: none"> •Effluent Treatment Industry •Sheet / Float Glass Industries •Glassware Industries •Ceramic Floor & Wall Tile Industries •Sanitary ware Industries •Ceramic Frit Industries •Cement Industries •Paint Industries •Rubber Industries •Sponge Iron Industries •Pipe Coating Industries •PP master batches, •LDPE masterbatches •Rigid PVC Pipes •Leather Cloth Industry •Paints, Inks, Powder Coating & Ceramic Industry
Typical Properties of Calcite :	<ul style="list-style-type: none"> •Higher flow properties •Higher mechanical properties in thermoplastic applications •Better gloss and whiteness in Paints & Powder coating application •Excellent dispersion properties •Prevents chalking •Better corrosion resistance
Chemical Composition Of Calcite Powder:	<ul style="list-style-type: none"> •CaCO₃ 90% to 97% •MgO 1.5% to 2.5% •Silica 1 % to 3.5% <p>Variation of the specifications stated due to natural raw materials & environment conditions are possible, though they have no influence on the application properties described</p>

DOLOMITE



DOLOMITE is a natural Calcium Magnesium Carbonate with high degree of purity and whiteness. Dolomite (Dolomite Powder) is rock forming mineral which is noted for its remarkable wet ability and dispersibility as well as its moderate oil and plasticizers absorption. Dolomite has got increased weathering resistance capacity. We are one of the prominent Dolomite powder manufacturers, suppliers and exporters located in India.

Composition of Dolomite Powder

1	Application :	Refractoriness, Ceramic, Detergent, Paint, Glass, mixture in manufacturing floor tiles, paper etc.
2	Commodity :	Dolomite
3	Chemical Composition :	Carbonate of calcium and magnesium
4	Chemical Formulas :	$\text{CaMg}(\text{CO}_3)_2$
5	Hardness :	3.5 to 4
6	Colour :	Colorless, White, Dirty Yellow, Brown Grey and Black.
7	Quantity :	Monthly -> Lumps 2000 mts/month Powder 500 mts/month
8	Specifications :	(a) Refractories : MgCo More than 35 % SiO ₂ Less than 10 % (b) Flux CaO 29 % (c) MgO 20 % (d) SiO ₂ 4.0 %

		(e) Al ₂ O ₃ 2.2 %
9	Packing :	Standard Packing available in 50 kg. HDPE bags & 1 or 1.25 mt Jumbo bags with liner inside, or as per customer requirements.

DOLOMITE USES

Powder and grains of this material is used in following Industries:

1. Ceramic – As a Filler
2. Paint – As a Filler
3. Wall Texture – Grains are used as texture.
4. Wall Putty – As a main Filler
5. Cement Bricks – Used as a main component or Filler.
6. Engineering Stone / Counter tops / Quartz Stone – Used as Filler.
7. Steel – Used as purifying agent.
8. Rubber – Substitute of Calcite and Filler.
9. Electrodes – As Filler
10. Glass Industry – Used as a purifying agent.

ACTIVATED BLEACHING EARTH,



Bleaching earth is also known as fuller's earth and is clay that is mined in various countries including in Asia, India, USA and the UK. Once you obtain bleaching earth you get a substance that is rich in minerals and it is used for various purposes including for bleaching, absorbing and filtering.

Bleaching earth can be used in its normal state but it is also put through washing as well as heating. This is done in order to reduce the moisture in the bleaching earth and to remove microorganisms.

Activated bleaching earth can be mixed with hydrochloric and sulfuric as well as some other acid. Bleaching clay absorbs some odors that are very unpleasant and include odors of ammonia and tars as well as sulfurs. Bleaching earth has strong absorbent properties and this allows it to retain some of the chemicals and oils when used as filler.

Bleaching clay absorbs some odors that are very unpleasant and include odors of ammonia and tars as well as sulfurs. Bleaching earth has strong absorbent properties and this allows it to retain some of the chemicals and oils when used as filler.

We are expertise in the field of manufacturing Bleaching Earth and Fullers Earth , both by dry process and wet process. Therefore, we are in advantageous position of offering you different grades from both dry and wet process as well as by the combination of both the processes.

This results in selection of a very cost-effective and high quality Bleaching Earth grade. A specific set of various grades will be suggested on receiving the details of application.

We also offer a free of charge, service for examination of your oil samples in our laboratory to determine the correct grade and optimum dose of our range of Bleaching Earth.

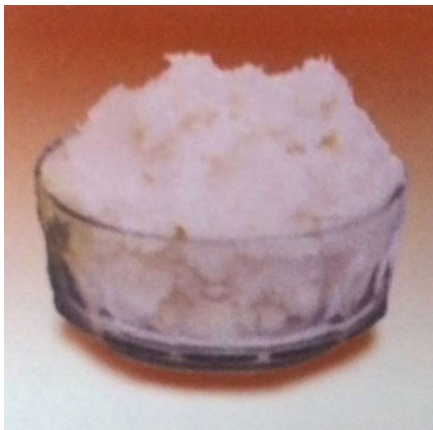
Application

Our Fuller Earth & Dico Fill grades of earth finds use in following fields.



Refining of Vegetable oils like

To avoid loss of activity, moisture proof plastic woven bags with polyethylene liner each containing 25/50 kg material are used for packing. Bags may also be palletised, if required. Higher quantity packing like 600/1000 kg jumbo bags can be offered on special request.



Hydrogenated Vanaspati Ghee Oils

Refining of hydrogenated vanaspati ghee oils, Margarine & shortening.



Refining of Animal Fats, Industrial Triglycerides and Fatty Acids

Refining of Animal Fats like tallow oil, fish oil, lard oil.

Industrial triglycerides and fatty acids used for paints, varnish and Soaps



Refining of Mineral Oils like

- Paraffin and waxes
- Insulating oil
- Rolling oil
- White oil
- Waste oil (lubricating oil)

Refining of Mineral Oils like

- Removal of impurities from solvents (for dry cleaning)
- Bleaching of sulphur
- Effluent treatment plants

Packing

Packing

- To avoid loss of activity, moisture proof plastic woven bags with polyethylene liner each containing 25/50 kg material are used for packing. Bags may also be palletised, if required. Higher quantity packing like 600/1000 kg jumbo bags can be offered on special request.

Storage

- It is essential to store the product in a dry place to avoid moisture absorption which can reduce bleaching efficiency.

Handling

- Activated Bleaching Earth is a free flowing powder. It can very well be pneumatically conveyed via vacuum line. Normal handling has no effect on skin.

Quality

During manufacture, stringent control is exercised on following properties of Our Bleaching Earth.

Bleaching Activity

- A hard to bleach oil, color is treated with various dosages of our Earth under standard vacuum, temperature, contact time and stirring. The colors are measured in Lovibond Tintometer and the results are compared with standard earth results.

Acidic property

- Measurement of residual free acid content as well as pH value of water solution filtered out of the Bleaching Earth are routine test with titration method as well as pH meter and stringent standards are maintained for the same.

Water content

- Moisture content is measured in a standard laboratory drying chamber as well as by Karl-Fisher- titrations.

Particle – size distribution

- It is checked on standard sieves by careful air stream sieving as well as on particle size analyser.

Filtration property

- We have a standard, exhaustive, test method for determining the filtration properties of our bleaching earth. We filter oil under standard conditions of temperature and pressure difference over an oil-wet-filter-cake. Stringent standards are followed and maintained to ensure fast filtration rate of the Bleaching Earth.

Oil Retention

- This is a supplementary test carried out in conjunction with filtration test. It depends on activation and particle size of Bleaching Earth and is maintained at the minimum levels.