Vaaidehi Minerals

We Add Value to your Products

An ISO 9001 :2008 Certified Company

Inspiring quality & performance for satisfying our customer needs is the #1 and only aim of our management team.

Vaaidehi Minerals is a part of nearly 10 years old Vaaidehi Group of companies.

We are engaged in processing & distribution of industrial minerals like Talc, Mica, Dolomite, Silica, Feldspar, Calcite, China Clay, Barites etc. and,
Specialty chemicals like Zinc Stearate, Dibasic Lead Stearate, Calcium Stearate, Ca-Zn Stabilizer, Ca-Pb Stearate, PVC Stabilizer and Zinc Oxide etc.

We have an inhouse developed processing system with a capacity of processing 72,000 MT of material per annum.

Advantages to our Clients:

- Mining Advantages
- Processing Advantages
- Price Advantages
- Quality Assurance with
- Time Bound Delivery

Calcite / Grounded Calcium Carbonate (GCC):

Calcium carbonate is the most widely used mineral, both as filler and due to its special white color - as a coating pigment. Calcium carbonate, as it is used for industrial purposes, is ground calcium carbonate, or GCC. GCC, as the name implies, involves crushing and processing limestone to create a powdery-like form graded by size and other properties for many different industrial and day-to-day life applications.

The properties of calcite make it one of the most widely used minerals. It is used as a construction material, abrasive, agricultural soil treatment, construction aggregate, pigment, pharmaceutical, acid neutralization, Sorbents, monuments & statuary and more. It has more uses than almost any other mineral. This makes it a very essential mineral in our day-to-day life.

Our Standard GCC Grades:

Calcite Grades	VC - 99H10	VC - 96M10	VC - 95L10	VC - 96MC10	VC - 95LC10
Product Name	Premium quality Calcite powder superfine	High grade limestone powder very fine	Calcite powder for paint and plastics	Coated Calcite powder (1.5% Stearic)	Coated Calcite powder (1% Stearic)
Whiteness (%)	99	96 - 97	95	96	95
Moisture (%)	> 0.5	> 0.5	> 0.5	> 0.5	> 0.5
pH	10 to 11	9 to 10	9 to 10	9 to 10	9 to 10
Specific Gravity	2.7 - 2.8	2.6 - 2.8	2.6 - 2.8	2.6 - 2.8	2.6 - 2.8
Oil Absorption	18 to 20	14 to 18	12 to 15	18 to 22	16 to 20
Particle Size	10 micron	10 micron	10 micron	10 micron	10 micron
Top cut	20 micron	40 micron	40 micron	40 micron	40 micron
CaCo3 (%)	> 98.7	93 - 95	> 90	93 - 95	> 90
MgO (%)	< 0.5	1.0 - 1.5	1.5 - 2.0	1.0 - 1.5	1.5 - 2.0
Fe2O3 (%)	< 0.5	0.5 max	1.0 max	0.5 max	1.0 max
SiO2 (%)	< 0.5	2.0 - 2.5	2.0 - 3.0	2.0 - 2.5	2.0 - 3.0
Applications	In Rubber, Plasti c (gum), Paper, Paints & coatings, ink.	In paints, Plastics, Rubber & Paper	Filler in Paints & Plastics industry	Coated filler in high quality Paints & Plastics	in Paints & Plastics industry

Excise	As Applicable
CST/VAT	2% CST against 'C' Form Otherwise 5%
Packing	50 Kg HDPE Bag
Freight	Extra
Offer Validity	5 Days
Payment	Advance, L/C, T/T

Note: Apart from the above grades, we do manufacture tailor made Calcite based upon clients' requirement.

Calcite / Limestone Applications:

A. Calcite in Paper industry: In the paper industry it is valued worldwide for its high brightness and light scattering characteristics, and is used as an inexpensive filler to make bright opaque paper. In past few decades, the use of calcium carbonate has grown significantly as technology in the paper industry has moved from acid to neutral sizing. Today, calcium carbonate is the most widely used mineral in paper-making. GCC and PCC are used both as a filler and a coating pigment, and help produce papers with high whiteness and gloss and good printing properties.

B. Calcite in Plastics industry: Calcium carbonate is by far the most important mineral for compounding with polymers. By weight it accounts for more than 60% of the filler and reinforcements market. Main applications include plasticized and rigid PVC, unsaturated polyesters, polypropylene and polyethylene.

   Other important areas of use include rubber, foamed latex carpet-backings, sealants and adhesives. Calcium carbonate is not only a filler added to reduce costs and extend petroleum based resources, many properties of the plastic can be influenced by the use of calcium carbonate. Breathable PE-films for hygiene products and the building industry, for example, can only be produced with the incorporation of a filler such as calcium carbonate.

C. Calcite in Paints and Coatings industry: As an extender, calcium carbonate can represent as much as 30% by weight in paints. Calcium carbonate also is used widely as a filler in adhesives, and sealants. In paints and coatings, calcium carbonate has established itself as the main extender. Fineness and particle-size distribution can contribute to the opacity of coatings. Moreover, calcium carbonate can offer improvements in weather resistance, anti-corrosion and rheological properties, coupled with low abrasiveness, low electrolyte content, and a pH stabilizing effect. In water-based systems calcium carbonate reduces the drying time.

D. Calcite in Pharmaceuticals and Food industry: Calcium carbonate is used widely as an effective dietary calcium supplement, antacid, phosphate binder, or base material for medicinal tablets. In products such as baking powder, toothpaste, dry-mix dessert mixes, dough, and wine. Calcium carbonate is the active ingredient in agricultural lime, and is used in animal feed.

E. Calcite in Environment protection: As a natural product, calcium carbonate is perfect for environmental protection applications. For example, flue gas desulphurization, drinking water treatment, waste water treatment and forest and lake liming for the neutralization of acid rain, are all growth areas for the use of calcium carbonate. It has a natural buffer-effect and works as a pollution-filter. These properties, likewise, apply to the derivative products.

F. Calcite in Agriculture industry: Calcium fertilizers were one of the first to be widely used. The Greeks and Romans were aware of their attributes. Their use guarantees an adequate supply of calcium to plants and stabilizes the pH-value of the soil.
   These characteristics make calcium carbonate an important fertilizer for the agriculture and forestry sectors. Europe is one of the biggest buyer of this material. Other agricultural-related uses of calcium carbonate include its use as a calcium supplement in animal feed compounds.

G. Calcite in Building Materials and Construction: Calcium carbonate is critical to the construction industry, both as a building material in its own right (e.g. marble), and as an ingredient of cement. It contributes to the making of mortar used in bonding bricks, concrete blocks, stones, roofing shingles, rubber compounds, and tiles. Calcium carbonate decomposes to form carbon dioxide and lime, an

important material in making steel, glass, and paper. Calcium carbonate has found an innovative application in the concrete market.
It is increasingly used as a quality filler in concrete applications, such as concrete wares (paving-stones, tubes, sewage-tanks), ready-mixed concrete and prefabricated elements. It improves the concrete density, pre-stability and durability. Its stable color quality increases the aesthetics which make it very suitable for architectural applications.

H. Calcite misc. Applications : these are as following:-

a. Used in pollution control, neutralizing chemicals for acid wash, source of calcium salt.
b. Applications of this is also in bulk like cement, steel and other industries.
c. Pulverized limestone and marble are often used as a dietary supplement in animal feed. Chickens that produce eggs and cattle that produce milk need to consume a calcium-rich diet. Small amounts of calcium carbonate are often added to their feeds to enhance their calcium intake.
d. Glass, ceramics and blackboard chalk, together with cleaning, dental care and cosmetic products are produced by the wide range of industrial manufacturers who rely on calcium carbonate.
e. As a natural mineral, calcium carbonate has a multitude of characteristics that make it an ideal raw material for widely differing uses.
f. No one calcium carbonate is exactly like another, whichever property is needed a high grade product is there to meet the demand.
g. Diverse requirements such as low iron oxide content for the production of high-quality glasses, the authorization for uses in foodstuffs, good buffering-effect or low abrasion, can be met by an existing grade of calcium carbonate.

We ensure the highest grade & uniform particle size product for the industries like Plastics & paints.

For more information please visit us @ www.vaaidehiminerals.com

Address: 4-C, Haridas Ji Ki Magri, Hotel Udaivilas Road, Udaipur -313001

· Call +91 954 954 6222 · E-Mail: vaaidehiminerals@gmail.com