



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

Natural Silica / Micro Silica:

Silica is a chemical compound consisting of one part silicon and two parts oxygen. Silica is one of the most complex and most abundant families of materials, existing both as several minerals and being produced synthetically. Notable examples include fused quartz, crystal, fumed silica, silica gel, and aero gels. Applications range from structural materials to microelectronics to components used in the food industry.

Paints and Plastics, Polymer Compounds, Rubber, Sealants and Adhesives: Crystalline silica, in its finest flour form is used as reinforcing filler. Silica flour provides resistance against abrasive actions and chemical attack. Self-cleaning exterior wall coatings and heavy-duty offshore or marine paints are typical examples. The intrinsic properties of silica flour promote its use in plastics for encapsulating electronic components.

An estimated 95% of silicon dioxide produced is consumed in the construction industry, e.g. for the production of cement. Silica is used primarily in the production of glass for windows, drinking glasses, beverage bottles, and many other uses. The majority of optical fibers for telecommunication are also made from silica. It is a primary raw material for many ceramics such as earthenware, stoneware, and porcelain. Silicon dioxide is also used to produce elemental silicon. The process involves carbothermic reduction in an electric arc furnace. This makes it a very essential mineral in our day-to-day life.

Our Standard Silica Grades:

Silica Grades / Model no.	VS - Nature	VS - Wash
Product Name	high purity natural silica sand	High quality Silica powder 200 mesh
Color	White	White
SiO ₂ (%)	99.5	99.9
Al ₂ O ₃ (%)	0.15	0.02
Fe ₂ O ₃ (%)	0.041	0.1 max
CaO (%)	0.1 max	0.02
MgO (%)	0.05	0.01
All Sizes available*	200 mesh	200 mesh
Applications	Glass & pottery; paints; Rubber	Paints; Plastics; and Glass industry
Ex. Factory Price / MT		

We have fine& high purity silica with very low Iron content.

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 Silica sand based upon clients' requirement.

Silica Applications:

1. Glass & Pottery: Silica is used in bulk in glass industry, Ferro silicon, Ferro alloys, welding rods, pottery industries. It is also used in making silica Ferro manganese alloys.

Silica is the major ingredient in virtually all types of glass. The principal glass products include containers (bottles and jars), flat glass (windows, mirrors, and vehicle glass), tableware (drinking glasses, bowls, and decanters), lighting glass (light bulbs, fluorescent tubes), TV tubes and screens (including flat screens), decorative glass optical glass, etc. The glass fibres, mainly used for composite reinforcing or in decorative textiles, are made from fine ground silica flour.

2. Paints: In wood finish, primers, undercoats, water based paints, distemper, chemical resistance coating, floor coatings etc. It is recommended for texture coating and exterior finishes.
3. Ceramics: Typical everyday products such as tableware, sanitaryware, ornaments and wall and floor tiles but also high tech ceramics contain silica flour that has been ground to fine sizes to form a major constituent of ceramic glazes. Crystalline silica is a main component in the production of refractory bricks, ladle linings and fluxes.
4. Plastic & Rubber: Silica is used as filler in plastic industry.
5. Foundry Casting: Crystalline silica has a higher melting point than iron, copper and aluminium. This enables castings to be produced by pouring molten metal into moulds made out of silica sand and a binder. Castings form the basis of the engineering and manufacturing industries. Quartz and cristobalite flours are the main components in investment casting (also called precision casting) for the production of specialist products such as jewellery, dental bridges, aviation turbines and golf clubs.
6. Filtration: Closely sized silica sand is the principal filtration medium used by the water industry to extract solids from wastewater.
7. Sports and Leisure: Silica sand is used for equestrian surfaces, including the production of all weather horse racing tracks. It is also used in the production of root zones and drainage media for high specification football and other sports pitches and for golf courses. It is also used in play sand pits for the construction of sand castles.
8. Construction: Silica is also used in construction of Cement and chemicals for spray plasters. The construction industry is founded on silica sand and flours. There are a host of specialist applications including cement manufacture, silica and aerated concrete blocks, glues for roof and floor tiles, flooring and rendering compounds, white line markings, roofing felt and cement and resin injection systems.
9. Oil field application: Special grades of silica sand that are of coarse size and have spherical particles are pumped down oil wells and into the oil-bearing strata to improve permeability and the flow of oil into the well.

10. Agriculture: Silica is used in farming, market gardening, horticulture and forestry in applications such as soil conditioner or carrier for fertilizer and animal feed additives.
11. Chemicals: Cristobalite sand and high purity quartz are used to produce a range of silicon chemicals including sodium silicate, silica gel, silicones, silicon tetrachloride, silanes and pure silicon. Pure silicon is used for silicon chips, the heart of the computer world. Silicon products are used in the production of detergents, pharmaceuticals and cosmetics.
12. Metallurgical Industry: Quartz is the raw material for the production of silicon metal and ferrosilicon. Silicon metal is used in the production of alloys based on aluminium, copper and nickel. Ferrosilicon is a major alloying ingredient for iron and steel. Metal ores are purified in the furnace by silica sand that is transformed into metal slag.
13. Food and pharmaceutical: Silica is a common additive in the production of foods, where it is used primarily as a flow agent in powdered foods, or to absorb water in hygroscopic applications. It is the primary component of diatomaceous earth. Colloidal silica is also used as a wine, beer, and juice fining agent. In pharmaceutical products, silica aids powder flow when tablets are formed.



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