

Earth to Enterprise: Pure, Transparent, Trustworthy Bentonite



DISTRIBUTOR AND EXPORTER OF BENTONITE

www.terracoremineral.com



About Us

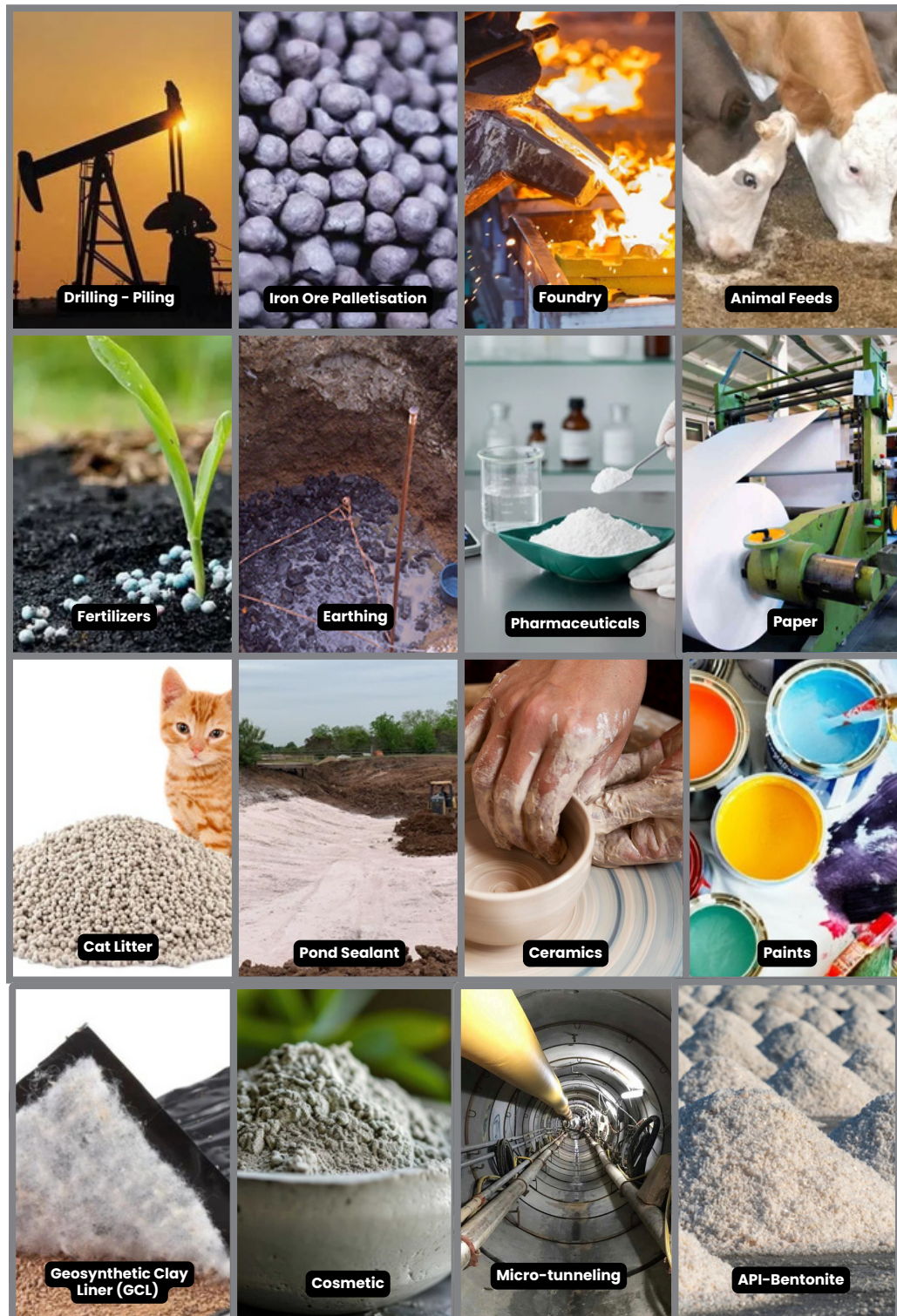
TerraCore Minerals is a globally recognized Distributor, supplier, and exporter of high-quality bentonite products based in Gujarat, India. Situated in one of the richest bentonite reserves, we specialize in producing a wide range of bentonite grades for diverse industrial applications.



Our proximity to major western ports like Mundra and Kandla allows us to ensure efficient logistics and timely delivery across international markets. With modern processing facilities, we maintain consistent quality and reliability in every batch. Our product range includes sodium and calcium bentonite suitable for drilling, construction, foundry, agriculture, oil purification, and more. We are committed to sustainable mining and strict quality standards to meet evolving global demands.

We Cater to a Diverse Range of Products Across Various Industries

We are committed to meeting the demands of various types of products across different industries, including :



Drilling-Piling

Our Drilling/Piling Grade Bentonite exhibits excellent fluid retention properties, enabling it to form stable drilling muds. It creates a high-viscosity slurry that effectively suspends cuttings, preventing their settlement and ensuring smooth and efficient drilling operations. We manufacture High yield Bentonite as per Indian Standards (IS), American Petroleum Institute (API) and Oil Companies Material Association (OCMA) Standards.

We cover all possible usage of Bentonite customized to meet rheological properties in achieving desired parameters for wide range of **civil applications suitable for Diaphragm walling, Board piling, Micro Tunneling, Pipe – jacking & Horizontal drilling, Oil well drilling, Water well drilling, Grouting applications etc.**

Benefits

- Maintains Thixotropic properties in high temperature in deep drilling.
- Excellent lubrication withstands formation Pressure, prevents water seepage into formations.
- Cuttings from boreholes are smoothly removed.



Iron Ore Pelletization

At TerraCore Minerals, we understand the crucial role that bentonite plays in iron ore pelletization, where it acts as a binding agent and promotes the formation of strong and durable pellets. With extensive expertise and a commitment to excellence, we have developed an Iron Ore Pelletization Grade Bentonite that exceeds industry standards and meets the unique requirements of mining and pelletization projects worldwide.

Benefits

- Excellent Ball and Dry Strength with lesser consumption of Bentonite.
- High absorption capacity prevents lumping and caking of the pellets.
- Faster Formation Pellets reducing production time & better productivity.
- Excellent Binding strength minimizes rejection loss in process loss.



Foundry

We source our bentonite from the finest reserves, guaranteeing consistent quality and performance for Foundry Industry.

The carefully engineered particle size distribution of our bentonite allows for optimal flowability, ensuring easy mold filling and uniform distribution of the casting material. Our bentonite exhibits exceptional bonding properties, enabling it to create strong and durable molds. It ensures excellent green strength, reducing the likelihood of mold deformation.

Our Bentonite can be used for green sand molding applications including Alpha lines, High pressure Molding lines with flask and without flask.

Benefits

- Easy mulling and faster gelling minimizes sand mixing time.
- High Swelling and Excellent gel uniformly binds sand grains.
- High Green Compression Strength keeps mold strength intact eradicates mold breakages.
- Scabbing, rat-tail and buckles defect is almost zero.
- Good Shakeout Properties & Surface finish with lesser generation of dead clay .



Animal Feeds

With a commitment to excellence and innovation, we have developed a range of premium bentonite products designed to enhance the nutritional content and performance of animal feeds. Bentonite, known for its unique absorbent properties, offers a range of advantages when incorporated into animal nutrition. The contamination of feed with mycotoxins is a continuing feed quality and safety issue. It is used in animal nutrition along with other micro nutrient in Poultry and Cattle feed to adsorb mycotoxins and reduce mycotoxin bioavailability from contaminated feeds in the animal's gut. Bentonite has the ability to absorb and adsorb toxins and impurities, which detoxifies and cleanses the body and helps in better productivity.

Benefits

- Bentonite act as sequestering agents for aflatoxins, it decrease bioavailability of the toxin in the gastrointestinal tracts of birds and animal guts.
- Eliminates toxins, detoxifies and cleanses the gut.
- High Binding properties enhances quick formation of pellets keeps ingredients intact. Pellet hardness retained for longer duration minimizing feed loss.



Fertilizers

Bentonite is widely being used in fertilizers industry manufacturing DAP, NAPK and Sulphur fertilizers. It improves the fertility of the soil, enhances microbial activities and keeps grain dry and free flowing with uniform suspension of active ingredients. It is economical and eco-friendly solution to improve the yield of the crops and retain soil nutrients for longer duration.

It is used as Filler and binder in several organic manure, used for coating over urea, DAP and other Fertilizers, used in pesticides as carrier of micro nutrients.

Benefits

- Improves soil fertility & crop productivity.
- Act as Granulation Agent and Enhances buffering capacity of Soil.
- Fast dispersion and absorption retains micro nutrient of soil.
- Helps in uniform release of ingredients into soil.
- Faster development of bonding properties.



Earthing

Bentonite is used in earthing applications as a conductive material to improve the electrical conductivity of the soil. It has a high cation exchange capacity, which means it can attract and hold positively charged ions, such as sodium, calcium, and magnesium. These ions can help to improve the conductivity of the soil and reduce its resistance, allowing electrical currents to flow more easily. Bentonite holds moisture, retaining water for longer duration of time compared to traditional earthing compounds such as salt and coal, due to this the shelf life of earth conductivity lasts for longer period of time, also it protects earth conductor from corrosion

Benefits

- Low resistivity & Low maintenance cost.
- Non-corrosive on Earthing conductors.
- Suitable for all kind of soils.
- In pit moisture is retained even in dry surface.
- Easy to use, Non-toxic, Non inflammable & Eco friendly.



Cosmetics – Pharmaceuticals

Bentonite Clay : A Natural Solution for Skin Care and Wellness

Bentonite clay is an absorbent natural clay that has been used for medical and Skincare purposes for centuries. Rich in essential minerals like calcium, magnesium, and iron, it offers a wide range of benefits for the skin.

Benefits

- **Detoxifies the Skin** : Bentonite clay effectively absorbs fine particles, such as dirt, bacteria, and toxins, leaving your skin clean and refreshed.
- **Treats Oily and Acne-Prone Skin** : Its high cation exchange capacity helps draw out impurities and excess oil, making it an excellent treatment for acne and oily skin.
- **Prevents Blackheads** : By unclogging pores and removing buildup, it helps prevent the formation of blackheads.
- **Protects from Sun Tanning** : Bentonite's soothing properties can help calm sunburn and reduce tanning effects.
- **Promotes Glowing Skin** : Regular use enhances skin texture and radiance, giving your skin a healthy, natural glow.

Uses in Skincare Products:

Bentonite clay is commonly used in face masks, cleansers, and other skincare products to remove impurities and toxins. It's also a key ingredient in industrial protective creams, calamine lotion, wet compresses, and anti-irritant products for conditions like eczema. In addition to skincare, it functions as a thickener and stabilizer in lotions, creams, and shampoos, providing a smooth, creamy texture while enhancing product shelf life.



Paper Industry

Bentonite in the Paper Industry

Bentonite is widely used in the paper industry for its versatile properties, serving as a retention agent, coating agent, and filler to enhance paper quality.

- **Retention Agent:**

Bentonite is added to paper pulp to improve the retention of fine particles, such as fillers, dyes, and pigments. This enhances the quality of the paper while reducing the number of raw materials required to produce a specific paper grade.

- **Coating Agent :**

In the production of coated papers, bentonite is used as a coating agent. The coating process involves applying a layer of bentonite to the paper surface, which improves printing properties like ink absorbency, print sharpness, and color reproduction.

- **Filler :**

Bentonite also functions as a filler in papermaking. Adding it to the pulp increases the bulk and opacity of the paper, resulting in a more substantial product with a higher-quality feel and improved visual characteristics. Bentonite's multi functional role contributes significantly to the performance and aesthetics of paper products.



Cat- litter

Bentonite is natural mineral comprised of Montmorillonite with good absorption capacity, swelling 15-20% times its original volume making it ideal to be used for cat litter.

Made with finest and high quality Bentonite selectively mined and processed, giving high absorption property absorbs litter and odour faster and emits fragrance instantaneously. It forms a clump over the wet area, which makes it easy to clear the waste and the unused material stays intact for further use.

Benefits

- High Absorbent formula forms clumping fast. Odour free – long lasting fragrance.
- No crumbling / dusting due to high binding and absorbent properties.
- Soft on Cats skin and non- toxic. Economical, Easy to use, Easy to clean & Eco Friendly



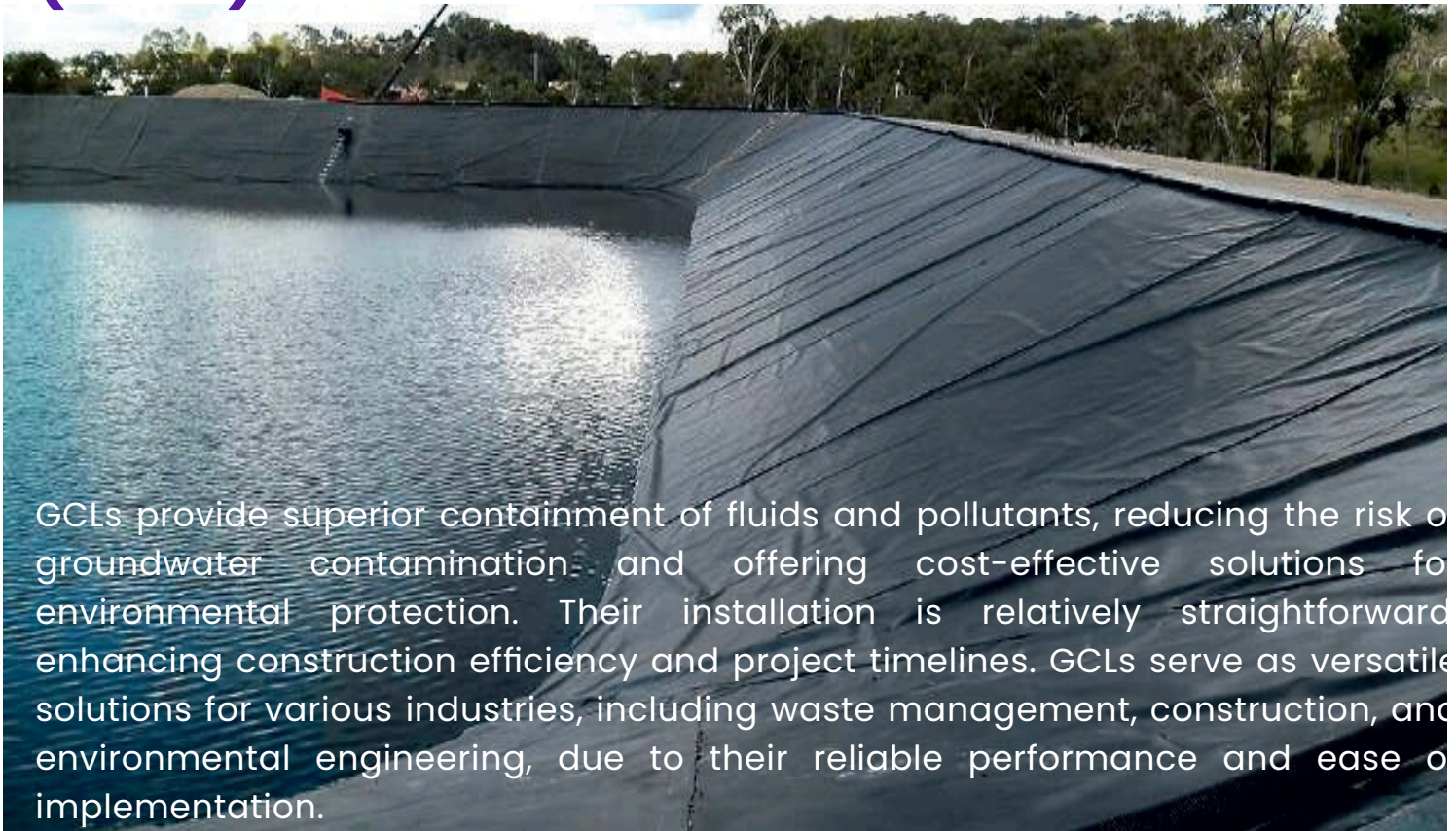
Pond- Well lining / Sealing

Bentonite is a naturally occurring clay due to its swelling property act as an sealant and blocks the water passing through it. It swells 15-20 times more than it weight providing very effective and cost efficient sealing without polluting the water. It can be used for pond sealing, mineral exploration site holes, well sealing, dam sealing etc.

Before applying bentonite, it is important to analyze the soil to determine its composition and properties. Soil that is high in clay content may not require as much bentonite, whereas soil with a lot of sand or gravel may need more. The recommended application rate of bentonite for pond sealing is typically between 2 to 6 pounds per square foot, depending on the soil type and the desired level of sealing.



Geosynthetic Clay Liners (GCLs)



GCLs provide superior containment of fluids and pollutants, reducing the risk of groundwater contamination and offering cost-effective solutions for environmental protection. Their installation is relatively straightforward enhancing construction efficiency and project timelines. GCLs serve as versatile solutions for various industries, including waste management, construction, and environmental engineering, due to their reliable performance and ease of implementation.

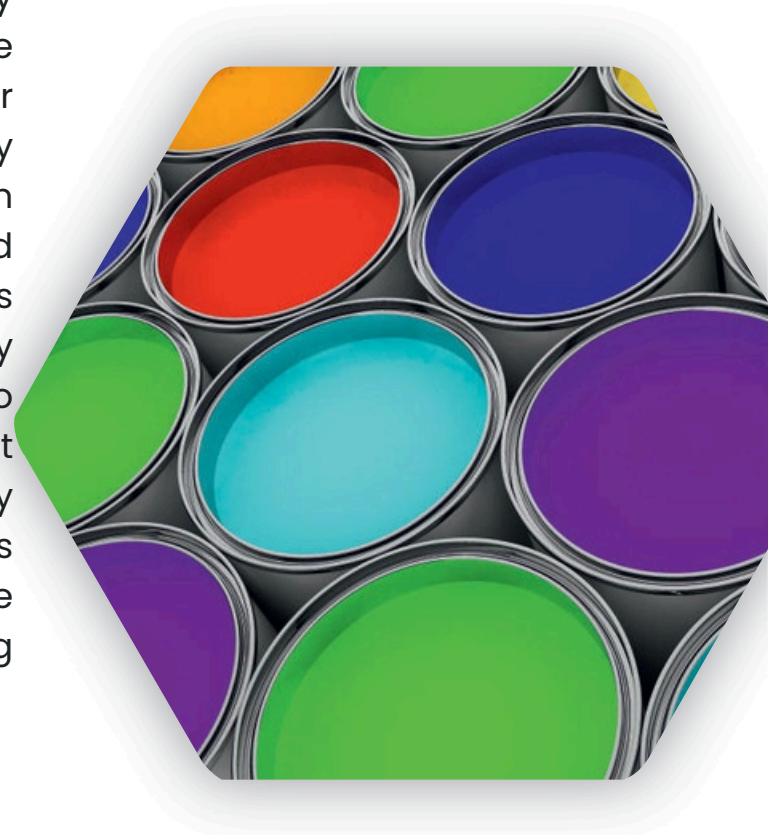
Ceramics

Bentonite is basically being used as filler in Ceramics. It is selectively mined and processed under controlled parameters to achieve desired plasticity covering large surface area for Ceramic Industries, generates good dry strength without effecting fired surface.



Paints

Bentonite is used in the paint industry as a thickening and suspension agent. Its ability to absorb water and create a gel-like substance makes it an effective thickener that can improve the viscosity and stability of paint formulations. Its high cation exchange capacity allows it to attract and hold positively charged ions, such as pigments, which can be dispersed evenly throughout the paint. Bentonite can also improve the flow and leveling of paint formulations, making them easier to apply and creating a smooth, even finish. Its lubricating properties can help to reduce friction between paint particles, improving the overall performance of the paint.



Bentonite + Coal dust

It is premium quality blend of Bentonite and coal dust additives optimize to suit customized requirements of foundry Industry. It is one shot addition for Bentonite and coal dust additives into sand system.

The use of a bentonite-coal mixture in foundry systems significantly improves mold performance, casting quality, and operational efficiency, making it a crucial component in the metal casting industry. When bentonite and coal dust are combined in a green sand mixture, they create a synergistic effect that enhances the performance of the foundry molds. The bentonite provides the structural integrity and binding strength, while the coal dust improves the mold's thermal properties and reduces casting defects.

Benefits

- **Enhanced Mold Stability** : The mixture provides a stable and strong mold that can withstand the mechanical and thermal stresses of casting.
- **Reduced Defects and Improved Surface Finish** : The combination helps in reducing defects like porosity and sand inclusion, leading to higher quality castings with smoother surfaces.
- **Cost Efficiency** : The reusability of the sand mixture and reduced need for machining lowers overall production costs.



Other - Grades

Desiccants

Absorbs moisture from the atmosphere at the time of shipping and storing to protect goods from moisture. Widely used for Electronic Devices, Leather Goods, Food, Machineries Equipment etc. extending shelf life of products.

Refractories

Bentonite is used in Refractories bricks lining to prevent molten metal damaging furnaces. It acts as plasticity agent between the refractory ingredients used for making refractories which gives a better shelf life to the linings.



Packaging

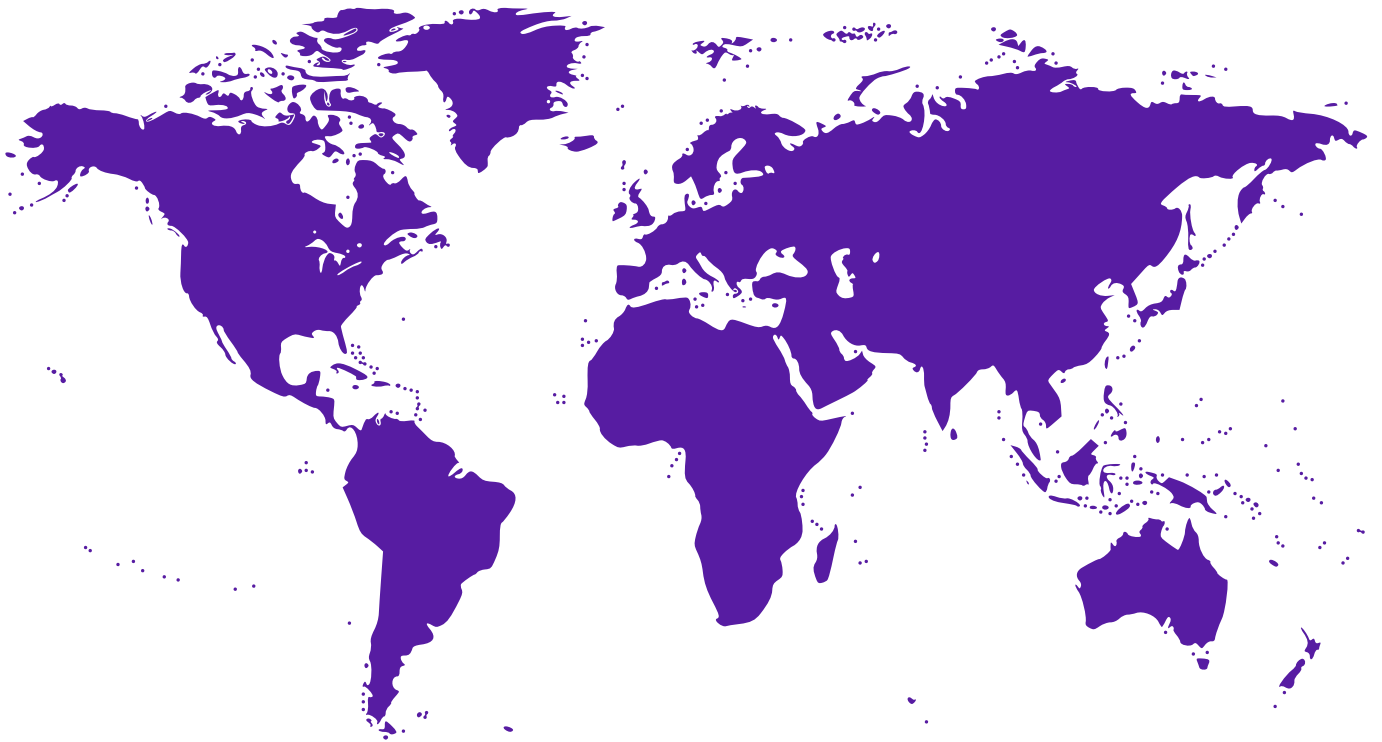
We offer a variety of packing options to meet our customers' specific requirements. Our materials can be packed in different types of packaging, including,

- 25 kg HDPE bags
- 50 kg HDPE bags
- 1 MT jumbo bags
- 1.25 MT jumbo bags
- 25 kg paper bags
- And more, as per your needs

We also cater to loose bulk orders for various types of minerals. For loose material shipments, we offer the following options:

- **Chartered Ship** : The minimum order quantity will depend on the availability of the vessel.
- **Loose Material in Containers** : We can load the material directly into containers without any packing, with the minimum order quantity based on the specific requirements.






TERRACORE


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PURE MINERALS. STRONGER FUTURE.

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