



KUTCH BENTONCLAY INDUSTRIES

Reliable Bentonite Solutions for Global Industries
MANUFACTURER AND EXPORTER OF BENTONITE

www.kutchbentoclayind.com

AN ISO 9001: 2015 COMPANY





INTRODUCTION

We "**Kutch Bentonite Industries**" is strategically positioned in the heart of Gujarat's rich bentonite reserves, with direct access to premium quality deposits..

Our state-of-the-art processing facility, spanning 16 acres, is located near the Mundra and Kandla ports, ensuring efficient logistics and global reach. With our own mines in close proximity, we maintain complete quality control from extraction to delivery.

"**Kutch Bentonite Industries**" is an industry leading manufacturer of bentonite powder producing top-of-the-line products. We believe that all of our clients deserve the highest level of service, and we are committed to providing just that. By keeping a pulse on upcoming trends, we've gained a competitive edge that has made us the successful company we are today.





Corporate Office & Plant

Our corporate office and manufacturing plant are located at Survey No.795, Vinjan Hajapar Road, Vill-Vinjan, Tal. Abdasa, in the Kutch region of Gujarat. an area rich in natural bentonite deposits, with extensive reserves within a 100 km radius of our facility.

The plant is equipped with cutting-edge technology and modern machinery, including roller mills, silos, forklifts, and weighbridges, all operated and maintained in strict adherence to the highest Environmental, Health, and Safety (EHS) standards.

A fully equipped laboratory and processing unit ensure that our products consistently meet the highest quality standards, fulfilling the diverse demands of our global clientele.

With operations across major countries, we have firmly established ourselves as a global leader in the industry. Our integrated infrastructure supports a range of specialized departments, including mixing, plant & maintenance, quality control, procurement, marketing, exports, business development, logistics, and finance, making us a fully operational, end-to-end organization.





Production Facilities

Our production unit is located at Survey No: 795, Vinjan Hajapar Road, Vill: Vinjan, Ta: Abdasa - Gujarat - INDIA strategically positioned to facilitate efficient exports. Our Factory is just 80 km from Mundra Port and 150 km from Kandla Port, ensuring seamless connectivity to major sea ports for timely deliveries to international markets

Annual Capacity

(in terms of Quantity - Metric Tons)

- ✦ Production Capacity: 90,000 MT
- ✦ Raw Material Processing Capacity: 160,000 MT
- ✦ Raw Material Storage Capacity: 30,000 MT
- ✦ Finished Goods Storage Capacity: 8,000 MT
- ✦ Grinding Mill : 3 Nos. Roller Mill & 2 - Nos. of Pulveriser Mill
- ✦ Silo (Storage) : 400 MT
- ✦ Packing machine : Manually & Automated
- ✦ Weigh-Bridge : 100 MT Capacity
- ✦ Fork Lift : 2 Nos.
- ✦ HM Loader : 3 Nos.





Industries we cater

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



Iron Ore Pelletization



Foundry



Animal Feeds



Fertilizers



Earthing



Pharmaceuticals



Paper



Cat Litter



Ceramics



Pond Sealant



Pre Mix Coal Bentonite



Drilling - Piling

Bentonite is a critical component in oil and gas drilling, primarily used to create drilling mud (drilling fluid). Its unique ability to swell and become viscous when mixed with water provides several technical and safety advantages.

Piling Grade Bentonite (often referred to as Civil Engineering Grade) is a high-yield sodium bentonite specifically processed for deep foundation work. In projects like bored piling, diaphragm walls, and micro-tunneling, it serves as the "liquid scaffolding" that prevents massive excavations from collapsing

Benefits

- ✦ Wellbore Stability (Filter Cake Formation)
- ✦ Excellent lubrication withstands formation Pressure, prevents water seepage into formations.
- ✦ Borehole & Trench Stabilization





Iron Ore Palletization

At Kutch Bentonite Industries, 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

- ✦ Exceptional Binding Strength
- ✦ High absorption capacity prevents lumping and caking of the pellets.
- ✦ Thermal Stability & Shock Resistance.
- ✦ Excellent Binding strength minimizes rejection loss in process loss.
- ✦ Faster Pellet Growth Rate





Foundry / Casting

We produce high-purity sodium bentonite used as the primary binding agent in "Green Sand Casting." In this process, it is mixed with silica sand and water to create robust, heat-resistant molds for molten metal. 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.

Benefits

- ✦ High Green Compression Strength (GCS).
- ✦ The fine particles of the bentonite fill the microscopic gaps between sand grains. This creates a very smooth "face" on the mold, which translates directly to a smooth surface on the cast metal part. This reduces the need for expensive post-casting machining and grinding
- ✦ Proper foundry bentonite creates a porous enough bond that these gases can escape through the sand rather than getting trapped inside the metal. This significantly reduces porosity defects (air bubbles) in the finished casting.





Livestock & Poultry Feed Bentonite

Bentonite is a specialized, high-purity clay used primarily as a health-promoting additive and a processing aid in livestock and pet nutrition. It is highly valued for its ability to bind toxins and improve the physical quality of feed.

Bentonite has a naturally negative electrical charge. It acts like a magnet, attracting and binding to positively charged toxins in the animal's digestive tract. These toxins are then passed out of the body safely through waste rather than being absorbed into the bloodstream.

Benefits

- ✦ **Stronger Pellets:** It helps hold the compressed feed together, reducing "fines" (dust/broken pieces) during transport.
- ✦ **Anti-Caking Agent:** It prevents the feed from clumping or sticking together in humid storage conditions, ensuring it flows freely through automated feeding systems.
- ✦ **Powerful Toxin Binding (Mycotoxin Mitigation)**





Fertilizers

Fertilizer Grade Bentonite is a dual-purpose material. It is used by manufacturers as a high-performance binder and carrier during production, and by farmers as a soil conditioner that improves nutrient efficiency.

Controlled Delivery: Pure elemental sulphur cannot be absorbed by plants directly. When mixed with bentonite, the clay swells upon contact with soil moisture, breaking the sulphur into tiny particles that bacteria can easily convert into plant-usable sulphates.

Benefits

- ✦ **Reduced Leaching:** It prevents nutrients from being washed away (leached) by heavy rain or irrigation, ensuring the fertilizer stays in the root zone for a longer period.
- ✦ It holds onto positively charged nutrients (like Potassium, Calcium, and Magnesium) and prevents them from binding to other soil minerals. It then "releases" these nutrients to the plant roots on demand.





Earthing

Earthing Grade Bentonite (also known as Ground Enhancement Material) is a specialized sodium-based clay used to improve the performance of electrical grounding systems. It is installed around earth electrodes (rods, plates, or mats) to ensure that fault currents and lightning strikes can safely dissipate into the ground

Benefits

- ✦ It can reduce soil resistivity by up to 80%. By creating a highly conductive environment around the electrode, it ensures that electricity follows the path of least resistance into the earth, protecting people and sensitive equipment from surges.
- ✦ It can absorb up to 5 times its weight in water. Unlike standard soil, which dries out in summer, bentonite retains a "gel-like" state for long periods. This keeps the grounding system active and efficient even during dry seasons or in arid climates.
- ✦ Earthing grade bentonite is non-corrosive and chemically neutral. It acts as a protective "envelope" around the metal rod, shielding it





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 multifunctional role contributes significantly to the performance and aesthetics of paper products.





Premix Coal Bentonite

A premix bentonite powder is a specially blended, fine clay powder (usually sodium bentonite) mixed with other agents like coal dust or sand conditioners to enhance its properties, primarily for foundry use as a strong, reusable binder for molding sands, improving surface finish, reducing defects, and offering excellent thermal stability, with core components providing binding strength and adding carbon for better casting quality.

Benefits

- ✦ **Enhanced Mold Strength & Integrity:** Provides high binding capacity for stronger, more durable molds. **Improved Casting Quality:** Reduces defects such as sand blow, scabs, gas defects, and inclusions, leading to better surface finish and dimensional accuracy.
- ✦ **Increased Sand Reusability:** Extends the life of molding sand, reducing the need for new sand and lowering dumping **costs**.
- ✦ **Thermal Stability:** Withstands high temperatures in metal casting processes without degrading.
- ✦ **Cost-Effectiveness:** Lowers fettling costs (cleaning cast parts) and reduces steel shot consumption in blasting, making it an economical choice.
- ✦ **Environmental Advantages:** Reduces sulfur content, creating a better working environment and offering an eco-friendly solution





Pond- Well lining / Sealing

Bentonite is a naturally occurring clay due to its swelling property act as a sealant and blocks the water passing through it. It swells 15-20 times more than its 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.





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 bags
- ✦ 50 kg bags
- ✦ 1 MT jumbo bags
- ✦ And more, as per your needs

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.





KUTCH

BENTONCLAY INDUSTRIES

Reliable Bentonite Solutions for Global Industries



+91 99795 40790 | + 91 84695 40790



www.kutchbentonclayind.com



Info@kutchbentonclayind.com, Exports@kutchbentonclayind.com



Suvery No. 795, Vinjan Hajapr Road, Vill-Vinjan,
Abdasa-Kutch. Gujarat - India - 370465