













#### **About Us:**

M/s Balaji Minechem is a trusted company based in Gujarat that is involved in the manufacturing and supplier of Bentonite Lumps & Powder. Company established in the year 2010.

Our Company has their own Mines located within the Kutch District also company has their own equipment's like Tractor, Loader, Dumper, Poclan etc. A factory with hi-tech processing machines and a laboratory fully equipped for minerals testing.

The plant is located at a 5 acre facility, designed to international standards. The milling equipment and handling systems are modern and well designed for producing good quality products.

We have our manufacturing unit based in Village: Vandh, Tal. Mandvi – Kutch (Gujarat) with a grinding capacity of more than 2500 MT/Per Month.

We maintain good cooperation with our Customers to satisfy their need by ensuring high quality standards. Product Quality, Customer Service, On-time Delivery, Response to Customers and Marketing strategy are our strength to grow and success.

We are committed to continual product improvements using the latest in technology and statistical methods that document our progress. We also aim to develop, manufacture, market and the finest bentonite products in the world.

The strategy is to offer consistent high quality to customers in the different market segments with a good service.

The products are developed keeping a solution based approach in the different markets and are backed up by leveraging the Group's strong technical and global market capabilities.



### **Balaji Minechem Foundry Grade Bentonite Powder:**

All Cast Iron, Steel & Malleable iron founders are almost using

Bentonite with cost efficient results, kutch region is famous for a very good sodium Bentonite for casting industries

continuous mold making kutch Bentonite is used successfully. Bentonite is used as a bonding materials in the preparation of moulding sand for the production of cast iron, steel and non ferrous casting. The unique properties of bentonite yield green sand moulds with good flow ability, compactability and thermal stability for the production of high quality castings.

Balaji Minechem Foundary Grade Bentonite is a sodium based bentonite of high purity mined and processed especially for foundry from ores with high compositions of montmorollinite.

The man features of Balaji Minehem Foundry Grade Bentonite are listed below:

- . Excellent gelling which gives high strength in less mulling time.
- . Swelling & pH Maintaining
- . Acts as a quick bonding element
- . Great thermal stability with generation of lesser dead clay
- . Active clay maintaining due to high montmorillonite values.
- . High Strength on good compatibility.
- . Environmentally Acceptable.

## Foundry Grade Bentonite Powder Physical Analysis:

Properties	Unit	Result			
		Foundry Normal Bond	Foundry Insta Bond	Foundry Super Bond	Foundry High Bond
Free Swelling Volume 2 gm/10 ml	ml	20-22	24-25	28-30	32-35
Methylene Blue Absorption	mg/gm ofclay	325-350	375-400	375-425	400-450
Gel time 2.5 gm/25ml	Second	1 min	Instant	Instant	Instant
Wet Tensile Strength (N/cm2)	ml	0.20-0.22	0.23-0.25	0.25-0.30	0.30-0.40
Geling Index	ml	80-90	80-90	85-90	85-90
Moisture Content % bt weight	%	12% max	12% max	12% max	12% max
PH Value 2% slury	рН	9.0-10.0	9.0-10.0	9.0-10.0	9.0-10.0
Green Compression Strength	Psi	12	12	12.5	12.5
Passing 200 mesh	%	85 min.	85 min.	85 min.	85 min.



#### Balaji Minechem Iron Ore Pelletizing Grade Bentonite Powder.

Our Bentonite is unique sodium based bentonite. Our IOP grade bentonite is extraordinary solutions for Iron Ore Pellet binding and it can also with stand higher temperature since it contains more percentages of metal. The grade is also having higher natural percentage of Iron which is ideal in isolating ore pellets with the maximum percentages of Iron. The Iron Ore Palletisation plant can able to maintain active clay levels with reduced additions of Bentonite since IOP grade bentonite is having high Mont Values, It also offers more supervisor thermal durability.

The main features of Balaji Minechem I.O.P. Grade Bentonite are listed below:

## IOP Grade Bentonite Physical Analysis

Properties	Unit	IOP Insta Bond	IOP Super Bond	IOP High Bond
Free Swellings Volume 2gm/100 ml	ml	28-30	30-32	32-35
Methylene Blue Absorption Value	mg/gm of clay	350-375	375-400	400-450
P.W.A	рН	550650	600-700	650-750
Moisture Content % by weight	%	12% max	12% max	12% max
Passing 200 mesh If powder	%	85 min.	85 min.	85 min.



#### Balaji Minechem Poultry & Cattle Feed Grade Bentonite Powder Mineral Based Cattle Feed Additives

Swelling	10-15 cc
Moisture	10-12 %
рН	10 + 0.5
Fineness	75 to 80 microns (200 mesh)
Montmorillonite	80 to 90 %

The Importance of Balaji Minechem Poultry & Cattle Feed Grade Bentonite Powder

- 1. It works as a toxin binder for aflatoxins, ochratoxins and T2 toxins
- 2. It dose not bind vitamins in the gut.
- 3. It maintains the acid-base balance of the gut.
- 4. The special mineral components protect the liver and so liver generation is faster.
- 5. It increases the viscosity of food in the gut the movement of ingest a slows down. Food remains in the intestine for a longer time. Due to this the cow get more time to absorb the nutrients.
- 6. Balaji Minechem Poultry & Cattle Feed Grade Bentonite Powder acts as an immune supportive supplement because of which the general mortality comes down.
- 7. Its work as pellet binder. Wastage due to fines in minimal. Pellets will be hard and at the same time dissolve in water faster.
- 8. It replaces molasses as a pellet binder. Hence saving of money reduction in losses
- 9. It improvement of pellet durability
- 10. Reduction in losses due to pellet turning to powder on breaking.
- 11. Lubricating action resulting in less friction and therefore reduced wear on die plates and reduction in energy consumption.





### **Balaji Minechem API-OCMA Grade Bentonite Powder**

Bentonite is as a mud constituent for oil and water well drilling. Its role is mainly to seal the borehole walls, to remove drill cuttings and to lubricate the cutting head. The special higher mud yield results in using less quantity of Bentonite for the same standard mud. This results in lesser requirement of Bentonite.

- Retains thixotopic properties when met with brine and high temperature in deep drilling.
- Gives high barrel yield
- Withstands formation pressure
- API 13 A Section : 9 Grade Bentonite Powder: Physical Analysis:

#### API 13 A Section: 9 Grade Bentonite Powder: Physical Analysis

Properties	Protocol	Unit	Required	Result
Viscometer Dial Reading at 600 Ratio	API Spec. 13A:2004/ISO 13500:1998	r/min	30	34
Yield Point/Plastic Viscosity Ratio	API Spec. 13A:2004/ISO 13500:1998	-	3 max	2.85
Filtrate Volume	API Spec. 13A:2004/ISO 13500:1998	ML	15 max	14.4
Moisture Content	API Spec. 13A:2004/ISO 13500:1998	% by weight	10.0 max	10
Dry Screen Analysis (Reside Greater than 75 Micron) %	API Spec. 13A:2004/ISO 13500:1998	% by weight	4.0 max	3.0-4.0

#### OCMA DFCP - 4 Grade Bentonite Powder : Physical Analysis :

Properties	Protocol	Unit	Required	Result
Yield	OCMA DFCP-4	bbls/2000 lbs	90 min	99-115
A.P.I Filtrate Loss	mg/gm of clay	MI	15.0 max	13-14
Moisture Content	OCMA DFCP-4	% by weight	15.0 max	10.0- 12.0
Dry Screen Analysis 100 Mash Sieve residue	OCMA DFCP-4	% by weight	98.0 min	98.5
Wet screen Analysis 200 Mesh Sieve residue	OCMA DFCP-4	% by weight	2.5 mx	1.75



#### Balaji Minechem Pilling Grade Bentonite Powder

At the time of boring for Pile, the sides of the bore hole are subjected to numerous external forces and pressure like active earth pressure, hydrostatic pressure, pore pressure, etc. due to underground water. As a result the side of the bore become unstable and may collapse if the soil layers remain weak.

Due to its thixotropic property, bentonite is used as a supporting fluid to counter the external pressures and stabilize the sides of the bore hole.

Balaji Minechem Overseas Piling Grade Bentonite is a sodium based bentonite of exceptional purity procured from ores with a high composition of montmorollinite.

The main features of Balaji Minechem Piling Grade Bentonite listed below:

- Large Surface Area
- Commendable Gelling Strength
- Excellent plasticity and lubricity
- Impermeability
- Significantly low filter loss
- Environmentally Acceptable

#### Pilling Grade Bentonite Powder: Physical Analysis:

Properties	Unit	Result			
		Foundry Normal Bond	Foundry Insta Bond	Foundry Super Bond	Foundry High Bond
Liquid Limit	ml	350-400	400-450	450-500	500-600
Free Swellings Volume 2 gm/100 ml	mg/gm of clay	22-25	25-288	28-30	30-35
Particlesizefiner than 75 Micron Dry Passing	%	85 min	85 min	85 min	85 min
Marsh Funnel Viscocity	Min.	30-32	35-37	40-45	50-55
pH Value 2% Slurry	рН	9-10	9-10	9.510	9.5-10
Passing 200 Mesh	%	83-85min	83-85 min	83-85min	83-85min
Gel Time 2.5 gm/2.5 ml	Second	1 min	Instant	Instant	Instant
Moisture Content % by weight	%	12% Max	12% Max	12% Max	12% Max









# Balaji Minechem

Mines Owner Manufacturers of Kutch Origin Calcium & Sodium Base Bentonite Powder & Lumps.

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