



MAHADEV EXPORTS

MAHADEV EXPORTS is a trusted company based in Gujarat that is involved in the supplier of Bentonite Lumps & Powder. Company established in the year 1999. 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.

All Cast Iron, Steel & Malleable iron foundries are almost using Bentonite with cost efficient results, Kutch region is famous for a very good sodium Bentonite for casting industries continuous mould making Kutch Bentonite is used successfully. Bentonite is used as a bonding material in the preparation of moulding sand to produce cast iron, steel and nonferrous casting. The unique properties of bentonite yield green sand moulds with good flow ability, compact ability and thermal stability to produce high-quality castings.

MAHADEV EXPORTS Foundry Grade Bentonite is a sodium-based bentonite of high purity mined and processed especially for foundry from ores with high compositions of montmorillonite.

The main features of MAHADEV EXPORTS 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 Offlay	325-350	375-400	375-425	400-450
Gel time 2.5 gm/25ml	Second	1 min	Instant	Instant	Instant
Wet Tensile Strength (N/cm ²)	ml	0.20-0.22	0.23-0.25	0.25-0.30	0.30-0.40
Gelling Index	ml	80-90	80-90	85-90	85-90
Moisture Content % bg weight		12% max	12% max	12% max	12% max
PH Value 2% slurry	pH	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.

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.

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	pH	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.

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

The Importance of MAHADEV EXPORTS Poultry & Cattle Feed Grade Bentonite Powder

1. It works as a toxin binder for aflatoxins, ochratoxins and T2 toxins
2. It does 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 ingesta slows down. Food remains in the intestine for a longer time. Due to this the cow get more time to absorb the nutrients.
6. MAHADEV EXPORTS 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 is 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.



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.

- a. Retains thixotropic properties when met with brine and high temperature in deep drilling.
- b. Gives high barrel yield
- c. Withstands formation pressure
- d. 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
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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 (Residue Greater than 75 Micron) %	API spec. 13A:2004/ISO 13500:1998	% by weight	4.0 max	3.0-4.0

OCMA DFCEP - 4 Grade Bentonite Powder

Physical Analysis :

Properties	Protocol	Unit	Required	Result
Yield	OCMA DFCEP-4	bbls/2000 lbs	90 min	99-115
A.P.I Filtrate Loss	mg/gm of clay	ML	15.0 max	13-14
Moisture Content	OCMA DFCEP-4	% by weight	15.0 max	10.012.0
Dry Screen Analysis 100 Mash Sieve residue	OCMA DFCEP-4	% by weight	98.0 min	98.5
Wet screen Analysis 200 Mesh Sieve residue	OCMA DFCEP-4	% by weight	2.5 mx	1.75

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.

MAHADEV EXPORTS Piling Grade Bentonite is a sodium based bentonite of exceptional purity procured from ores with a high composition of montmorillonite.

The main features of MAHADEV EXPORTS Piling Grade Bentonite listed below:

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

Piling 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 Swelling Volume 2gm/100ml	mg/gm of clay	22-25	25-288	28-30	30-35
Practiclesizefiner than 75 Micro Dry Passing	%	85 min	85 min	85 min	85 min
Marsh Funnel Viscosity	Min.	30-32	35-37	40-45	50-55
pH Value 2% Slurry	pH	9-10	9-10	9.5-10	9.5-10
Passing 200 Mesh	%	83-85min	83-85min	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