



BENTONITE – FEED GRADE(TDS)

Product: Bentonite Feed Grade

Grade: Animal Feed Grade

Form: Fine Powder

Main Mineral: Montmorillonite

PRODUCT DESCRIPTION

High-quality **Feed Grade Bentonite**, naturally rich in montmorillonite and processed to achieve controlled particle size, moisture, adsorption characteristics and mineral purity. Suitable for animal feed, livestock and poultry feed formulations, pellet binding and technological feed applications.

PHYSICAL & MINERALOGICAL ANALYSIS

Parameter	Unit	Specification	Typical Result*	Test Method
Montmorillonite Content	%	Min. 75.0	86.4	XRD
Moisture	%	Max. 10.0	7.2	Oven Drying
pH (10% Suspension)	—	8.0 – 10.5	9.1	Potentiometric
Bulk Density	g/cm ³	0.70 – 1.00	0.82	Gravimetric
Passing 200 Mesh	%	Min. 95.0	98.1	Sieve Analysis
CEC	meq/100 g	Min. 60	82	CEC Method
Water Absorption	%	Min. 150	195	Gravimetric
Swelling Capacity	mL/2 g	Min. 15	22	Volumetric
Foreign Matter	%	Max. 0.50	0.12	Gravimetric

CHEMICAL ANALYSIS

Parameter	Formula	Unit	Typical Result*	Test Method
Silicon Dioxide	SiO ₂	%	61.8	XRF
Aluminium Oxide	Al ₂ O ₃	%	16.2	XRF
Iron Oxide	Fe ₂ O ₃	%	4.1	XRF
Magnesium Oxide	MgO	%	2.6	XRF
Calcium Oxide	CaO	%	2.4	XRF
Sodium Oxide	Na ₂ O	%	2.1	XRF
Potassium Oxide	K ₂ O	%	1.3	XRF
Titanium Dioxide	TiO ₂	%	0.48	XRF
Loss on Ignition	LOI	%	8.2	Gravimetric



HEAVY METALS ANALYSIS

Parameter	Unit	Specification	Typical Result*	Test Method
Lead (Pb)	mg/kg	Max. 15.0	6.2	ICP-MS
Arsenic (As)	mg/kg	Max. 10.0	3.1	ICP-MS
Cadmium (Cd)	mg/kg	Max. 2.0	0.42	ICP-MS
Mercury (Hg)	mg/kg	Max. 0.10	<0.02	ICP-MS

MICROBIOLOGICAL ANALYSIS

Parameter	Specification	Typical Result*
Salmonella spp.	Absent / 25 g	Absent
E. coli	Max. 100 CFU/g	<10 CFU/g
Total Aerobic Count	Max. 1×10^5 CFU/g	2.4×10^3 CFU/g
Yeast & Mold	Max. 1×10^3 CFU/g	<100 CFU/g

FUNCTIONAL PROPERTIES

Property	Typical Result*
Montmorillonite	86.4%
CEC	82 meq/100 g
Water Absorption	195%
Swelling Capacity	22 mL/2 g
Fineness (200 Mesh)	98.1% Passing
Moisture	7.2%
pH	9.1

APPLICATION

Suitable for use in:

Cattle Feed • Dairy Cattle Feed • Sheep & Goat Feed • Poultry Feed • Compound Feed • Feed Premixes • Pellet Feed

Typical technological applications include pellet binding, anti-caking, carrier applications and feed processing. Mycotoxin-binding claims should be supported by product-specific efficacy testing.

INDICATIVE INCLUSION RATE

Application	Typical Addition
Feed Technological Application	1 – 5 kg/MT
Pellet Binding	5 – 20 kg/MT
Specific Adsorption Application	According to validated product recommendation



PACKAGING

25 kg Bags | 50 kg Bags | 1 MT Jumbo Bags

STORAGE

Store in a dry, covered and well-ventilated area. Protect from moisture and contamination.

Shelf Life: 24 Months