

Technical Data Sheet

PRIME-GEL PREMIUM

Product Description: PRIME-GEL PREMIUM is an API certified 200 mesh premium-grade untreated sodium bentonite which complies with the current edition of API Specification 13A, section 10 requirements. PRIME-GEL PREMIUM functions as a viscosifier and filtrate reducer in freshwater drilling applications. PRIME-GEL PREMIUM bentonite is used when a 100% natural product containing no polymer or chemical additives is required. PRIME-GEL PREMIUM is used mostly as a drilling mud for such applications as oil well, mineral exploration, water well, seismic, caisson, and horizontal drilling. It is also used for slurry trenching, seepage cut-offs, pollution control, Reservoirs, Landfills, Hazardous Material Containment, and structural diaphragm walls.

Physical Properties:

Density (compact)	66 PCF
pH Value	8.5 – 9.0
Swell	1400 -1800 %
Color	Tan to Beige
API 13A Section 10 Specifications:	
Viscometer Dial Reading at 600 rpm	30
Yield Point/Plastic Viscosity Ratio	1.3 (1.5 Max.)
Dispersed Plastic Viscosity	11 (10.0 Min.)
Dispersed Filtrate Volume	12 cm ³ (12.5 cm ³ Max.)
Residue > 75 Micrometers	1.5 to 2.5 wt. %
Moisture	7-12 wt. %

Chemical Composition:

Quartz	SiO ₂	58.3%
Aluminum Oxide	Al ₂ O ₃	18.1%
Iron Oxide	Fe ₂ O ₃	2.6%
Magnesium Oxide	MgO	1.6%
Calcium Oxide	CaO	2.0%
Sodium Oxide	Na ₂ O	2.4%
Potassium Oxide	K ₂ O	1.5%
Loss of Ignition		5.3%
Moisture		8.2%

Mixing Recommendations:	lb./100 gal	lb./bbl.	Kg/m ³
Added to Fresh Water			
Normal drilling conditions	30-50	13-22	35-60
In Gravel or poorly consolidated Formations	60-80	25-35	70-100
To stop loss of circulation	70-95	30-40	85-110

Available Packaging:

50 lb., 100 lb. bags, super sacks FOB Oxnard, CA or Aurora, UT. DMI can also provide on-site storage.



Certified to
NSF/ANSI 60

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