



# MATRIX-GEL®

PREMIUM GRADE BENTONITE



## PRODUCT DATA SHEET

Use MATRIX-GEL® in drilling operations where premium grade Wyoming Bentonite is required. MATRIX-GEL® is a 200 mesh finely ground, 90 bbl. yield sodium bentonite for freshwater drilling. It is also used in slurry trenching, drilled shafts, and tunnel boring.

MATRIX-GEL is manufactured to exceed API 13A, Section 9 specifications. It mixes quickly and easily in fresh water and assists in stabilizing the borehole or trench walls. MATRIX-GEL yields excellent fluid loss properties.

## BENEFITS

- Reduces filtration by forming a thin filter cake
- Helps provide lubricity and cools the drill bit
- Removes cuttings

TYPICAL PROPERTIES	
Appearance	Gray to tan powder
pH	9.0-10.0
Specific Gravity	2.50 g/cm <sup>3</sup>
Gel Strength	4 ± <sup>1</sup> 10 sec
Gel Strength	12 ± <sup>2</sup> 10 min
Marsh Funnel Viscosity	38 ± <sup>4</sup> sec/qt
Moisture	8.0 ± <sup>2</sup> %
Bulk Density lb/ft <sup>2</sup>	68-72



PRODUCT SPECIFICATIONS	MATRIX-GEL	API SPECIFICATIONS 13-A, SEC 9
Viscometer 600 rpm Reading	38 ± <sup>5</sup>	30 min
Barrel Yield	98 ± <sup>2</sup>	---
Plastic Viscosity (PV)	12 ± <sup>2</sup>	---
Yield Point, lb/100ft <sup>2</sup>	14 ± <sup>2</sup>	3 x P.V. Max
Water Loss Filtrate	14	15 cm <sup>3</sup> Max
Wet Screen Analysis Residue on U.S.	3.0 ± <sup>5</sup>	4.0% Max
Sieve No. 200	---	---



The information contained herein is believed to be accurate and reliable. MATRIX Construction Products, LLC (MATRIX) accepts no responsibility for the results obtained through application of this product. MATRIX reserves the right to update information without notice. For the most current information see our website [matrixcp.com](http://matrixcp.com).  
**PDS UPDATED JANUARY 2024**





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**MIXING DOSAGE:** Mix slowly through a MATRIX Hydro-Mixer. Mixing ratios are based on the use of fresh water. Water purity will affect bentonite performance. For best results make-up water should be pretreated with M-Booster at 6-8 lb per 1000 gallons for a pH of 9.0-10.0.

ESTIMATED AMOUNTS OF MATRIX-GEL™ ADDED TO FRESH WATER BASED FLUIDS			
ADDED TO FRESH WATER	lb/100 gal	lb/bbl	kg/m <sup>3</sup>
Normal Drilling Conditions	30-50	12-22	35-60
Stabilize Caving Formations	60-80	25-35	70-100
Stop Circulation Loss	70-95	30-40	85-110
ADDED TO FRESH WATER DRILLING FLUID	lb/100 gal	lb/bbl	kg/m <sup>3</sup>
Normal Drilling Conditions	10-25	4-10	11-28
Stabilize Caving Formations	20-45	9-18	25-50
Stop Circulation Loss	25-50	10-20	28-57

**PACKAGING:** MATRIX-GEL is available in 50 lb multi-walled paper bags and bulk ton shipments.

**AVAILABILITY:** MATRIX-GEL can be purchased through any MATRIX Construction Products Representative. [Orders@matrixcp.com](mailto:Orders@matrixcp.com)



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