



BAROID CIVIL-GEL™

Viscosifier



Description CIVIL-GEL™ bentonite viscosifier is a finely ground, universal grade bentonite that is manufactured to exceed the API (American Petroleum Institute) requirements. CIVIL-GEL bentonite viscosifier is designed for use in oil/gas well drilling, water well, HDD (Horizontal Directional Drilling), minerals exploration, civil engineering and construction applications including bored piles, slurry wall, microtunneling, pipe jacking, and geotechnical applications.

Applications/Functions *The use of CIVIL-GEL bentonite viscosifier assists and promotes the following applications and functions:*

- Viscosify water-based drilling fluids
- Form a thin tough filter cake
- Reduce filtration into permeable formations
- Provide suspension of drilled cuttings
- Promote borehole stability in poorly consolidated formations

Advantages

- Easy to mix
- Rapid fluid viscosity development
- Yields excellent fluid loss characteristics
- Exhibits lubricity
- Economical

Typical Properties

- Appearance Variable color (tan to pinkish)
- Specific gravity 2.4 to 2.6
- Bulk Density 800 to 1200 kg/m³

Recommended Treatment

Typical Fluid Properties of CIVIL-GEL Bentonite Viscosifer (6% by Weight)		API Specification 13A, Section 9	API Specification 13A, Section 11
600 rpm reading	≥ 35	30 min	30 min
API filtrate, ml/30 minutes	13 to 15	15 max	16 max
YP/PV ratio (API)	1.5 to 3.0	3 max	6 max
pH	9.0 to 10.0	N/A	N/A
Moisture, %	10 to 12	N/A	13

Mix slowly through a jet mixer or shift slowly into vortex of a high-speed stirrer at a rate of 35 to 60 kilograms (kg) per one cubic meter of freshwater.

Packaging

CIVIL-GEL bentonite viscosifier is packaged in 25-kg multiwall paper bags and one metric ton jumbo bags.