

MAX GEL



MAX GEL viscosifier is a premium 220-bbl yield Wyoming bentonite blended with special extenders, capable of yielding more than twice as much viscosity as regular Wyoming bentonite. MAX GEL viscosifier is an easily mixed, superior Wyoming sodium bentonite for freshwater drilling and boring applications.

Typical Physical Properties

Physical appearance	Light tan/gray-green powder
Specific gravity	2.3–2.5
Approximate yield	220 bbl/ton

Applications

MAX GEL viscosifier is used in the following applications to rapidly build mud viscosity and provide superior hole cleaning, as well as to help control lost circulation, formation sloughing and promote hole stability in unconsolidated formations:

- Potable-water wells
- Mineral exploration (coring and rotary drilling)
- Horizontal directional drilling
- Blast holes
- Shaft drilling
- Monitor/observation wells
- Gel-foam, air-drilling applications

Advantages

- Yields more quickly than API-standard bentonite
- Non-toxic and proven suitable for use in drilling potable water wells
- Higher penetration rates than regular bentonite systems due to lower solids content
- Reduced transportation and storage costs as a result of less product required for treatment
- Finer grind to enable rapid mixing

Limitations

Loses effectiveness in water containing >7,500 mg/L sodium chloride/240 mg/L calcium.

If dispersants or thinners are to be used, they should be added sparingly, using 50% or less of the normal treatment.

Toxicity and Handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheets (MSDS).

Packaging and Storage

MAX GEL bentonite is packaged in 50-lb (22.7-kg), multi-wall, paper sacks and is available in bulk.

Store in a dry location (slip hazard when wet) and minimize dust (use dustless systems for handling, storage and cleanup). Material can be palletized at either 56 sacks/pallet or 70 sacks/pallet.

Store in a well-ventilated area away from sources of heat or ignition.

Typical Amounts of MAX GEL Additions Added to Freshwater			
Drilling Application/Desired Results	lb/100 gal	lb/bbl	kg/m³
Normal drilling	15–25	6–11	15–30
In gravel or other poorly consolidated formation	25–40	12–18	35–50
Lost-circulation control	35–45	15–20	40–45
Added to freshwater mud to improve hole-cleaning properties, increase hole stability and develop filter cakes	5–10	2–5	6–14