



# TUNNEL-GEL® PLUS

**Viscosifier/Gellant**

**Description** TUNNEL-GEL® PLUS viscosifier is a specially formulated, high-yield bentonite designed for use in tunneling and large diameter HDD operations. TUNNEL-GEL PLUS viscosifier promotes rapid viscosity development while maintaining effective borehole stabilization and enhanced filtration control in most water-based drilling fluids.

**Applications/Functions**

*The use of TUNNEL-GEL PLUS viscosifier assists and promotes the following:*

- Enhanced viscosity development in freshwater drilling fluids
- Effective cuttings transport and suspension characteristics
- Enhanced filtration control and resulting borehole stability
- Effective lubrication fluid for microtunneling operations

**Advantages**

- Easy to mix and quickly reaches maximum viscosity
- Enhances fluid lubricity for reduction of required jacking forces
- Yields more than twice as much drilling fluid of the same viscosity as an equal concentration of API grade bentonite

**Typical Properties**

- Appearance Yellow to tan powder
- Specific gravity, g/cm<sup>3</sup> 2.6
- pH (3% Solution) 10.4

**Recommended Treatment**

- To optimize the yield and performance of TUNNEL-GEL PLUS viscosifier, pre-treat make-up water with soda ash (sodium carbonate) at a concentration of 0.5 – 1.0 kg/m<sup>3</sup> to reduce excess calcium hardness to ≤100 mg/l and adjust pH to a range between 8.5 – 9.5.
- Using a Venturi hopper, or a colloidal mixer, add TUNNEL-GEL PLUS viscosifier, slowly and uniformly to the entire circulating system or mix tank.

Approximate Amounts of TUNNEL-GEL PLUS viscosifier Added to Water Based Fluids		
lbs/bbl	lbs/100gallons	kg/m <sup>3</sup>
8.4 – 12.6	20 – 30	25 – 35

**Packaging**

TUNNEL-GEL PLUS viscosifier, is packaged in 25-kg (55.1-lb) multiwall paper bags.

**Availability**

TUNNEL-GEL PLUS viscosifier, can only be purchased through European Baroid Industrial Drilling Products Retailers. To locate the Baroid IDP retailer nearest you contact the Customer Service Department in Houston or your area IDP Sales Representative.

**Baroid Industrial Drilling Products  
Product Service Line, Halliburton**

3000 N. Sam Houston Pkwy. E.  
Houston, TX 77032

<b>Customer Service</b>	(800) 735-6075 Toll Free	(281) 871-4612
<b>Technical Service</b>	(877) 379-7412 Toll Free	(281) 871-4613