



Product & Mixing Guide

PRIMARY BENEFITS

- **Single Product Formulation** means no recipes or other additives needed; one product does it all.
- **Cuttings Fluidization** leads to lower torque
- **High Concentration Debris Removal** is aided by the unique high gel strength/ yield point properties of the fluid
- **Effective Filtration Control** created by the polymer matrix interacting with the bore wall.
- **No Silica Blend** eliminates damage to your equipment and exposure to personnel.

FAQ's

Is it normal for the fluid/returns to look light with bubbles present?

Yes. The interaction between the polymer blend being exposed to air naturally present in the soil creates a structural, activated fluid that might appear to be "light", but in reality has properties that match or even exceed traditional bentonite mixes.

Will TurboBore freeze?

No. TurboBore contains a biodegradable oil that will become viscous when cold, but will not freeze.

What is the difference between TurboBore and other ProAction (or competitor's) polymer products?

Not all polymers are created equal. ProAction offers several viscosifying, polymeric based products such as ProDrill, GeoSweep HD /LQ, and BoreShield. The low-end rheology to dose ratio for TurboBore is 2-3 times higher than these (and other products that claim similar properties). Even quadrupling the dosage of ProDrill (2-gallons per 500-gallons) will still result in carrying capacity and filtration control less than that of TurboBore.

TurboBore™ is a proprietary fluid technology comprised of synthetic polymers that activate when introduced to water. TurboBore is best suited for sand and rocky soil, and the rheology of TurboBore can match or exceed traditional bentonite/bentonite with additives mixes at up to an 85% reduction in material weight - significantly decreasing freight costs, improving warehouse efficiency, and providing HSE uplifts.

MIXING GUIDE

- ▶ 1 to 1.5+ EZ Bottles treats 500 gallons

The all liquid, rapid dispersion blend of TurboBore mixes easily and quickly. The best method to introduce TurboBore to a mix system is through the top of the tank, or through a suction-type manifold. The instantaneous viscosity once the product begins to hydrate can lower the pressure drop needed for a venturi to operate effectively, which will make TurboBore extremely difficult to introduce via venturi hopper. It is not uncommon for there to be "light" fluid present in the tank; with the amount proportional to product dosage and mixing energy. Continued "heavy" loadings (greater than 1.5 gallons per tank) can result in un-hydrated polymer being present in the system; it is critical to monitor your tank to ensure consistent performance.

To Mix TurboBore:

For maximum performance, it is recommended the tank be rinsed of any bentonite-based products. The largest determining factor for full hydration is mixing energy. Ensuring the system is operating efficiently will improve consistency of mixing.


Adding TurboBore to empty tank:

1. Fill tank to 50% of capacity (or just above roll jets)
2. Set Mixing System pump at full rpm with flow directed through roll jets
3. Add desired TurboBore loading through the top of the tank as the it is filled with the remaining balance of water
4. Allow tank to continue agitating via the rolls jets for 5-8 minutes to ensure full dispersion and hydration

Adding TurboBore to full tank:

1. Set Mixing System pump at full rpm with flow directed through roll jets
2. Add desired TurboBore loading through the top of the tank
3. Allow tank to continue agitating via the rolls jets for 5-8 minutes to ensure full dispersion and hydration

How does TurboBore dosage* compare to Bentonite?

Bentonite		
Max Gel, BoreGel/Quik-Gel, Super Gel X, Turbo Gel, Diamond Gel	100-lbs	.5 to 1 EZ Bottles
Max Bore, Quick Bore, Hydraul-EZ, Tru-Bore, ProVis HYB	100-lbs	1 to 1.5 EZ Bottles
Bentonite + Additives (such as Xanthan/PAC)	100-lbs + 5 lbs	1.5+ EZ Bottles

*based on 500-gallon tank