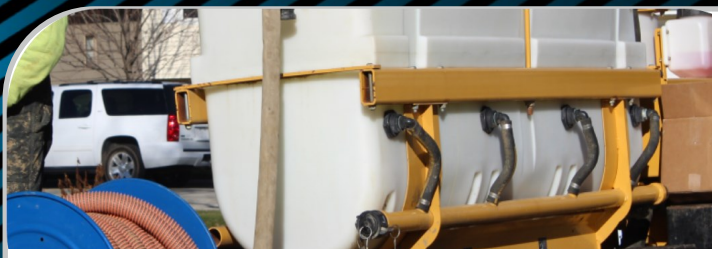

DrillClean Applications

Main Function: tank, tooling & equipment cleaner and sanitizer

DrillClean™ can be used as a tank, tooling, or equipment cleaner, and is designed to rapidly penetrate and breakdown dirt, clays, organic matter, clumps of partially-hydrated bentonite and/or coagulated bentonite-polymer mixtures. DrillClean™ reduces the effort required to clean up tanks, mixing equipment, hoses, drill, rods, and tooling that become soiled from mud mixing, soil, dirt and/or drill cuttings. There are multiple ways to apply DrillClean™ to your operations.

To clean heavily soiled tanks:

1. Add 2 to 4 EZbags of DrillClean™ to a tank with at least sufficient water to circulate the entire system.
2. Circulate DrillClean™ mixture through the system for about 10 minutes or until surfaces are free of debris. Opening all jet-lines and recirculating lines is recommended to remove any build-up of debris and prevent trapping any stagnant water in the flow lines.
3. Drain and Rinse tank before reuse if you are using bentonite-based mud. Drain tank and refill for use immediately if you are using ProAction Fluids mud additives.
4. To clean heavily soiled tooling and equipment:
   - Mix several tablespoons up to half of an EZ Bag with water into a 5 gallon bucket or other similar container
   - Spray, brush, or pour the mixture onto the soiled equipment or tooling.
   - Allow the mixture to soak for 5-15 minutes, and then rinse away loosened debris with a hose or wash nozzle.
   - Repeat as necessary until tooling and equipment is free of soil/debris.

DrillClean™ can also be used as an occasional preventative measure to reduce build-up and/or reduce the likelihood of harboring the bacteria in your system that can cause tank fouling.

1. To use DrillClean™ as a preventative, add 1 EZbag to your mud system while the tank(s) is circulating. While this can be done on any tank, doing this treatment on the last batch of the day is generally recommended to allow the treatment to stay in the system overnight for maximum effectiveness.
2. This treatment can be done intermittently (weekly, bi-weekly, etc) as desired to help keep your mixing system and equipment clean.

Drill Clean ™ can also be used as a preservative to help prevent water fouling of static tanks:

1. If a water tank or a PAF mud-mix is going to be left to sit without agitation for more than 12 to 14 hours, add 1 to 2 bags of DrillClean to your tank and circulate the system for 1 to 5 minutes before shutting down for storage.
2. Depending on the specific storage conditions, this treatment should prevent the stagnant water from fouling for several days.
3. Always recheck your mud properties before recommencing drilling. PAF products can be added on top of Drill-Clean™-treated water if any degradation of mud properties occurred during storage.*

**An important note for bentonite-based mud users – DrillClean™ is designed to rapidly break down dirt, organic matter, and clays (including bentonite), so it should therefore not be used with the intention of adding bentonite to water recently treated with Drill-Clean™. Bentonite may likely be added after several hours of circulation or after a day or two of storage, but testing a small batch mix in a jar or pitcher before reusing the tank is recommended. If bentonite will not yield in the test sample, drain and refill the tank(s) with freshwater prior to making another batch of bentonite-based mud.*

DrillClean™ can also be used to treat stagnant water that has already fouled.

1. While in this case, the best practice is always to purge, refill, clean with DrillClean™, drain, and then refill for your next mud mix, you can typically add 2 to 4 bags of Drill-Clean™ to your fouled tank.
2. Circulate for 20 minutes to 2 hours or until water is cleared up and foulants are neutralized, and then reuse the water by adding approximately 1.5 times the normal PAF mix dosage to the batch with the DrillClean™-treated water.
3. Checking the water properties, hydration efficiency, and yield of the PAF mix in a small batch (pitcher or jar) prior to putting new additives into the entire tank is strongly recommended.
4. In the subsequent use of the tank after running a 'once-fouled' batch of water, adding a preventative dose (1 EZ Bag per tank) is recommended on the next batch or two through the system.

ProAction Fluids