

DD TECH

Surfactant

Product Description

DD TECH drilling detergent is an aqueous blend of surface-active agents. It is designed to reduce the surface tension of all water-base mud systems and reduce the sticking tendency of water-sensitive shale cuttings.

Typical Physical Properties

Physical appearance	Light blue - green liquid
Specific gravity	1.01 - 1.02
pH (1% Solution)	7.5 - 8.5
Solubility in water	Soluble

Application

DD TECH has application in all drilling areas and can be used in virtually any water-base drilling fluid. It is used primarily in upper-hole drilling to minimize bit and bottom-hole assembly (BHA) balling, reduce surface tension, and aid in dropping sand and the removal of drill solids. It may be used as an emulsifier at any point in the drilling operation to improve emulsification of oil and reduce the viscosity of oil-contaminated fluids.

DD TECH is effective in all water-base systems including fresh water, brackish water, seawater and saturated saltwater fluids.

Advantages

- Minimizes bit and BHA balling
- Reduces the surface tension of the liquid phase, helping to drop sand and remove drill solids
- Improves water-wetting action on all solids and reduces the sticking tendency of reactive shale cuttings
- Functions as an emulsifier, reducing the viscosity of oil-contaminated fluids
- Effective in all water-base muds

Limitations

DD TECH, a special cold-weather formulation with a freezing point of -29°F (-20°C).

Recommended Treatment

DD TECH frequently reduces torque and drag, even when no oil is present in the system. Normal treatments range from 0.1 to 0.2 lb/bbl (0.29 to 0.57 kg/m³) and provide satisfactory performance under most conditions. In severe gumbo shale areas, 4 to 6 lb/bbl (11.4 to 17.1 kg/m³) concentrations of DD TECH are recommended to minimize bit and BHA balling; higher concentrations may cause foaming and require a defoamer.

Toxicity and Handling

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

Packaging and Storage

DD TECH surfactant is packaged in 5-gal (18.9-L) cans and 55-gal (208-L) drums. Store in a dry location away from sources of heat or ignition.

Important Note: These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and method of use of our product are beyond our control. We recommend that the prospective user determine the suitability of our material and suggestions before adopting them on a commercial scale.