

Diacel[®] D Powder Cement Extender Additive



Diacel[®] D Powder Cement Extender Additive is a special grade of refined diatomaceous earth that permits the formulation of high-yield, low-density cements. Diacel[®] D Powder Cement Extender Additives are useful in loss circulation applications or anywhere that low hydrostatic pressures are required. Diacel[®] D Powder Cement Extender Additive is especially useful in the formulation of CO₂-resistant cements due to its unique particle size and physical properties. Unlike cement extenders such as flyash, bentonite or other pozzalans, increasing the concentration of Diacel[®] D Powder Cement Extender Additive will result in an increase rather than a decrease in compressive strength.

Diacel[®] D Powder Cement Extender Additive is especially useful at elevated temperatures where it enhances the silicon oxide to calcium oxide ratio. This contributes to an improvement in corrosion resistance and inhibits strength retrogression. The typical usage concentrations range from 10% to 40% by weight of cement. Depending on the API class or ASTM type of cement utilized, densities of as low as 10.8 lb/gal may be prepared. Diacel[®] D Powder Cement Extender Additive is compatible with all typical specialty cement products.

Application Areas

- Fresh, salt or sea water

Typical Range of Use

Temperature upper limit ~ 230°F BHCT

Concentration 5-50% BWOC

Density 11-15 lb/gal

Physical Properties

- Gray powder
- Specific gravity = 2.1 g/cm³
- Disperses in water

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Drilling Specialties Company does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.