



Description:

CoreSMART incorporates the newest SMART polymer technology for use as a mineral exploration fluid, or slurry. Through dedicated research, KB International was able to impart the capacity for a CoreSMART fluid to restructure or modify itself to environmental changes or demands within a predefined framework. This permits the fluid to alter both its physical characteristics and performance properties in situ and allows it to more optimally respond to a specific challenge or to perform a desired function. CoreSMART envelops the surface of the sample as it is being cut with a protective polymeric shield. Immediately upon forming, the shield is interwoven with a network of polymer filaments around the sample imparting strength and durability. This network of filaments repels water insuring the sample is not deteriorated or washed throughout the coring and retrieval process. The result is a near pristine core when exposed on the surface.

Application:

CoreSMART is a drilling fluid developed specifically for the mineral exploration market. CoreSMART solves core recovery issues, is high temperature stable, keeps clays from swelling, reduces torque and rod chatter, and improves the bit life for increased penetration rates. Another feature of CoreSMART is the ease of use. No additives have been required. Just adjust the dosage of CoreSMART depending on the soil conditions; a great advantage for remote sites. CoreSMART can also use brackish or salt water as the makeup water.

Advantages:

- All-in-one container
- High core recovery
- Easily mixed in fresh water/salt water
- Environmentally friendly
- High temperature stability
- Keeps clays from swelling
- Reduces torque & rod chatter
- Lubricity for hard rock/diamond drilling
- Improves bit life
- Increases penetration rates
- Inhibits water sensitive formations
- Works in reverse circulation drilling
- Works with air drilling

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Physical Data:

Appearance:	Very light yellow to off white free flowing granular powder
Odor:	Virtually odorless
pH:	NA
Specific Gravity:	1.05-1.005 (Water = 1.0)

Mixing Instructions:

CoreSMART is a water soluble, free flowing powdered material. CoreSMART has been specifically designed for easy mixing and rapid hydration when combined with water. CoreSMART's dosage and viscosity will be selected and maintained based on expected soil conditions. General dosage guidelines are shown in the Recommended Dosage Table. CoreSMART can be mixed by slowly adding the product directly into the water stream entering the storage tank, into the water stream flowing across a splash plate or by incorporating the use of a Hootonanny Dry Polymer Eductor (available from KB International). After addition, allow solution to mix for 10 to 15 minutes and you will have a high performance coring fluid, providing core recoveries of unmatched integrity and quality of preservation.

Recommended Dosage:

Formation Type	Average CoreSMART Initial Dosage		
	kg/m ³ Water	lbs/yd ³ Water	lbs/300 gl Water
Standard Drilling Conditions	0.25	0.50	0.75
Swelling Clays and Shales	0.50	1.00	1.13
Highly Fractured/Permeable Zones	1.00	2.00	3.00

Packaging

55 lbs/25 kgs poly bags or 22 lbs/10 kg pails
Super Sacks available on request

Availability

CoreSMART is available from KB International's warehouse in **Charleston, SC, USA** and from regional distributors. Please contact KB International to locate the retailer nearest you.

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