

CA-FL8

FLUID LOSS ADDITIVE

DESCRIPTION

CA-FL8 is a premium quality fluid loss control additive for cement slurries prepared with saline mix water. CA-FL8 is fully compatible with a broad range of A.P.I. cement classes and other cement additives.

CA-FL8 is a free flowing, powdered organic polymer derivative.

ADVANTAGES

CA-FL8 fluid loss additive provides the following advantages: **CEMENTS** - CA-FL8 is fully compatible with API Class A, B, C, G, and H cements.

MIX WATER - CA-FL8 can be used in saline mix waters containing between 10% to 37% (saturated) salt.

COMPATIBILITY - CA-FL8 is fully compatible with all cement additives (i.e. retarders, accelerators, and extenders).

FLUID LOSS CONTROL - CA-FL8, when added in small quantities (0.5% - 1.0% by weight of cement), provides excellent water loss reduction.

FREE FLOWING POWDER - CA-FL8 ensures easy, smooth, no-lump mixing and full dispersion in slurry mix water.

CEMENT BONDING - The ability of CA-FL8 to provide effective water loss control prevents slurry dehydration, allowing improved homogeneous cement bonding.

"FLASH-SETTING" - Effective water loss control by CA-FL8 prevents excessive slurry dewatering, thereby minimizing the risk of "flash-setting".

APPLICATION

CA-FL8 can be used in a variety of cementing operations to provide effective water loss control in saline water slurries. The principal applications include (1) primary cement operations i.e. casing string cementation and (2) "squeeze" cementing (i.e. lost circulation problems; casing repairs; perforation sealing; and setting cement plugs, especially across permeable formations).

RECOMMENDED TREATMENT

Due to the new improved activity of CA-FL8, only small concentrations of this additive are required to provide excellent slurry fluid loss control. Normally, CA-FL8 is used in concentrations ranging from 0.5% to 1.0% by weight of cement. Generally, a 1% CA-FL8 concentration will provide a filtrate



loss of 100 ccs/30 min (standard API fluid loss procedure), in most cementing compositions. It is recommended that, prior to application, pilot tests be made using the cement class, mix water and any other additives anticipated for a specific cementing operation, in order to determine the concentration of CA-FL8 actually required.

MIXING PROCEDURE

CA-FL8 can be dry-blended with cement, or added directly to the slurry mix water prior to the cementing operation. If the CA-FL8 is to be directly added to the mix water, the following procedure is recommended: 1. Thoroughly clean and flush the mixing tank/rig pit and check all valves, and gates.

2. Flush through all suction lines, discharge lines, and the mixing centrifugal. Where water of a different salinity is used for the cleaning operation, care should be taken to ensure all lines are drained prior to preparing the mix water. 3. Add the necessary volume of water to the tank. Care should be taken to include an excess volume of mix water to allow for pump suction, and also in case of emergency. 4. Add the necessary quantity of salt (depending on the mix water salinity required) to the mix water. Care should be exercised to allow for the volumetric increase caused by the salt, and its effect on overall salinity. 5. Add the required concentration of CA-FL8 at a rate of 10-15 minutes per sack to enable smooth mixing and complete dispersion in the mix water. 6. Add any other cement additives that may be required. 7. Keep the prepared mix water continuously agitated by means of paddle agitators and gun lines to ensure complete mixing of all additives, prior to starting the cement job.

SAFETY AND HANDLING

As with any dry chemical, handling should be facilitated by rig personnel wearing protective gloves, eye goggles, and dust masks. Eye contact can result in some irritation. If this occurs, the eyes should be immediately flushed with water for a period of not less than 15-20 minutes. In the event that the irritation persists, medical attention should be obtained.

In the case of skin contact, if this is repeated or prolonged it may cause skin irritation. The area of contact should be thoroughly washed with soap and water.

ADDITIONAL INFORMATION

CA-FL8 is an exceptional fluid loss additive in saline mix water cement slurries. In low temperature well applications, a retarding effect is experienced with CA-FL8, which can be negated by the use of accelerators such as calcium chloride (CaCl₂). As stated previously, for optimum results in any particular cementing application, pilot tests should be performed to fully evaluate CA-FL8 performance and concentration.

PACKAGING

CA-FL8 is packaged in 50 lb (U.S.A.) and 25 Kg (Europe, Africa and Eastern Hemisphere) export quality sacks.

APLI FLUID LOSS

CEMENT : API CLASS G CEMENT

SALT (% BWOW)	CA-FL8 (% BWOC)	SLURRY DENSITY (PPG)	BHCT (° C)	API FLUID LOSS (mLs/30MIN)
10	0.5	15.9	65	195
18	0.5	15.9	65	205
37.2	0.5	15.9	65	440
10	0.75	15.6	65	165
18	0.75	15.6	65	190
37.2	0.75	15.9	65	230

