P-HTAS

CEMENTING SERVICE BULLETIN

10/4/18

P-HTAS (PETROCHEM - HIGH TEMPERATURE ANTI-SETTLING)

TECHNICAL DATA

P-HTAS is a powdered additive designed to prevent sedimentation and/or free water problems in cement slurries **at bottom-hole temperatures <500°F,** and is particularly effective in stabilizing over-dispersed cement slurries.

The normal concentration range of P-HTAS is between 1.0 % to 5.0 % (BWOC), which will stabilize cement slurries from 12 lb. /gal to 22 lb. /gal. P-HTAS can be used in fresh water or seawater slurries.

P-HTAS is compatible with all Petrochem additives and Portland cements. It may be blended with the cement or prehydrated in the mix water to prevent settling and free-water development in unstable cement slurries.

There will be an increase in the rheology of P-HTAS stabilized slurries requiring an increase in the critical pump rate for turbulent flow. Therefore a compromise should be made between rheology and stability.

PROPERTIES

PRODUCT	FORM	SP.GR.	PACKAGING
P-HTAS	WHITE POWDER	2.52	50 LB. SACKS

In cement systems containing other additives that exhibits a dispersing side effect, **P-HTAS** will show a great ability to offset such an effect, and in slurries, which tend to be over dispersed due to an easily dispersed cement brand, **P-HTAS** will prevent free-water and settling. Another excellent application is in both light weight and heavy-weight cement slurries with densities from 12.0 lb. /gal. up-to 22 lb. /gal.

P-HTAS can be used alone at concentrations as high as 5.0% BWOC to help stabilize low-density cement slurries, or with the use of extenders (such as Bentonite) where lower than normal slurry densities can be achieved without the development of free water. Further improvement of the use of P-HTAS can be obtained with P-D88 or P-D88L (Petrochem-Dispersant Liquid).

Mixing energy is also a factor to be considered in the design phase of P-HTAS slurries. The reason being is that a lower mixing energy in the field compared to a high mixing energy in the laboratory will cause higher rheologies and higher fluid-loss values. This is especially true when mixing slurries in the upper range of 15.8 lb. /gl. rendering field mixing problems.

If the mixing energy in the field is anticipated to be much lower than in the laboratory, the concentration of P-HTAS is to be reduced, dry blend instead of prehydrating, or change the mixing method to increase the mixing energy, such as batch mixing instead of jet mixing.

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P-HTAS enhances fluid-loss control additives and no accelerating effect has been observed; however, sometimes a slight retardation may occur.

FIELD MIXING PROCEDURES

P-HTAS may be dry blended with the cement or prehydrated in the mix water. The mixing equipment used for prehydrating must be clean, in particular, from mud contamination.

Circulate the P-HTAS at a high rate for 20 to 30 minutes (more in seawater) to complete the additive hydration. Prehydration of the other additives can then be done as per usual procedure. The sequence of the addition of the additives should be the same as that used in the laboratory.

The data given is to be used only as a guide. Subsequently, each job is to be designed and tested in the laboratory with the actual water, cement and additives intended for the job, and similar mixing energy is to be duplicated in the field.

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