DRILLING SPECIALTIES COMPANY

StabilSAS™

A Division of Chevron Phillips Chemical Company LP

StabilSAS™ is a commodity sodium asphalt sulfonate made water soluble through its unique sulfonation process. StabilSAS™ is a total mud conditioner that stabilizes shale formations, reduces coefficient of friction (COF) and lowers HTHP water loss. StabilSAS™ enhances filter cake properties in both oil-based and water-based muds.

Advantages

- Controlled water and oil solubility to effect best chemical and physical performance
- Reacts with shale to prevent or stop sloughing and swelling
- Reduces COF in both WBM and OBM/SBM systems
- Doesn't increase the rheological profile
- High temperature stability. It has a higher softening point than non-reacted or blown asphaltic additives
- Inhibits dispersion of drilled solids
- No emulsifiers needed to ensure proper mixing
- Stable in Drilling Applications in excess of 500 °F

Mud Types

StabilSAS $^{\text{TM}}$ is compatible with most water-based and all oil-based and synthetic muds.

Mixing Requirements

Conventional hopper when chlorides do not exceed 60,000 ppm. When adding to high salinity systems, pre-wetting StabilSASTM with fresh water by adding through chemical barrel may give best results.

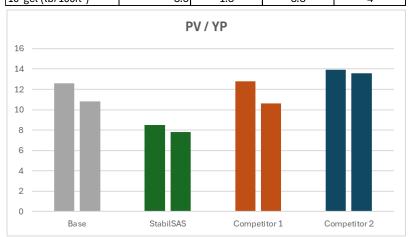
Handling

For specific instruction on handling, refer to the SDS

Packaging

50-pound, multiwall paper sacks

Rheology @ 120 ⁰ F AHR @ 225 F/ 16 hrs	Base	StabilSAS	Competitor 1	Competitor 2
600 rpm	36	24.8	36.2	41.4
300 rpm	24.4	16.3	23.4	27.5
200 rpm	18.3	12.4	18	21.7
100 rpm	11.9	8.2	11.6	14.5
6 rpm	2.4	1.6	2.3	3.3
3 rpm	1.6	1.2	1.6	2.5
PV (cps)	12.6	8.5	12.8	13.9
YP (lb/100ft2)	10.8	7.8	10.6	13.6
10" gel (lb/100ft ²)	2.4	1.3	2.3	2.7
10' gel (lb/100ft ²)	3.5	1.8	3.3	4



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.