

TECHNICAL DATA SHEET

DSC GOLD FLUSH SA Stimulation Additive and Cake Removal Agent

Outstanding Characteristics:

Maximum strength eco-friendly formulation for complete removal of oil base and synthetic oil base mud fluid cake and wellbore stimulation aid.

Description:

DSC Gold Flush SA is an innovative, environmentally friendly, concentrated downhole cleaning agent. DSC Gold Flush SA is a fast, effective, non-toxic and non-corrosive solvent especially designed for use in horizontal and vertical wellbore stimulation and cleanup. Safely cleans all surface tanks, lines and manifolds. DSC Gold Flush SA contains several demulsifying agents and silt suspending agents especially formulated to quickly remove all wall-cake in a single pass application.

Application:

For precise downhole filter cake removal and elimination of wellbore damage from oil base and synthetic oil base drilling fluid losses, the recommended amounts of DSC Gold Flush SA will vary from each wellbore. These are some of the factors that have a significant effect upon the cleaning process (and tend to accelerate cleaning when using DSC Gold Flush SA): downhole temperature (heat), aggressive chemicals (DSC Gold Flush SA), contact time and mechanical cleaning (annular velocity and agitation).

For the highest level of critical cleaning only neat solutions should be used to avoid any potential for cross contamination and solvent saturation.

DSC Gold Flush SA is especially formulated to penetrate, dissolve and remove oil base and synthetic oil base drilling fluid wall cake, whole mud and filtrate formation losses. DSC Gold Flush SA is designed to synergistically work together with DSC Gold Surf S.

For a specific DSC Gold Flush SA recommendation, technical and application information is available to help provide the best DSC Gold Flush SA eco-friendly solvent for your downhole cleaning needs. Please call a DSC Customer Service Representative at 1-800-737-3546.

Shipping And Handling Instructions:

DSC Gold Flush SA is shipped in 55 gallon drums, 350 gallon and 550 gallon stainless steel tote tanks. A Material Safety Data Sheet outlining recommended safe handling of DSC Gold Flush SA is available upon request.



TECHNICAL DATA SHEET

DSC GOLD VIS Cement Spacer Additive

Outstanding Characteristics:

Ideal viscosity agent for cement spacer systems.

Description:

DSC Gold Vis is a highly effective special Propriety polymer for use in thickening **DSC Gold Flush CM** for density control during the cementing operation.

For a specific **DSC Gold Vis** recommendation, technical and application information is available to help provide the recommended amount of **DSC Gold Vis** for your downhole cleaning needs. Please call a DSC Customer Service Representative at 1-800-737-3546.

Shipping and Handling Instructions:

DSC Gold Vis is shipped in 5 gallon, 55 gallon drums, 350 gallon and 550 gallon stainless steel tote tanks. A Material Safety Data Sheet outlining recommended safe handling of **DSC Gold Vis** is available upon request.



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DSC GOLD SURF S Displacement and Stimulation Additive

Outstanding Characteristics:

Ideal for lowering surface and interfacial tensions

Description:

DSC Gold Surf S is a concentrated blend of non-ionic surfactants and special alcohols. DSC Gold Surf S is designed to lower surface and interfacial tensions so that DSC

Gold Flush SA can penetrate and get under the synthetic oil or oil base drilling fluid wall cake and residuals and lift these particles from the downhole tubular and casing walls thereby allowing them to be circulated out and completely removed from the wellbore during the displacement and stimulation process. DSC Gold Surf S continues the cleaning process by coating oil or synthetic oil droplets (wall cake and mud particles that do not dissolve in water) with surfactant to keep them from reagglomerating and migrating to the casing and tubular surface.

Application:

The unique ability of **DSC Gold Surf S** to diffuse the surface of a liquid, adsorb to the surface and subsequently lower the surface tension of the solution of the oil base and synthetic oil base drilling fluid. **DSC Gold Surf S** works by orientating its polar and apolar head and tail groups at the liquid/liquid interface. When present in sufficient quantities, DSC Gold Surf S molecules aggregate to form clusters or "micelles" which prevent further change in the surface tension of the oil base and synthetic drilling fluid wall cake and residue. The concentration of the DSC Gold Surf S present when micelle formation occurs is characteristic of the critical micelle concentration or "CMC" of the solution. Adding more DSC Gold Surf S past the CMC can not only destroy the effectiveness of the DSC Gold Surf S, but significantly increase the cost of the displacement.

DSC Gold Surf S is appropriate for a wide variety of brine and completion fluid types.

For a specific **DSC Gold Surf S** recommendation, technical and application information is available to help provide the recommended amount of **DSC Gold Surf S** for your downhole cleaning needs. Please call a **DSC Customer Service Representative** at 1-800-737-3546.

<u>Shipping And Handling Instructions:</u> **DSC Gold Surf S** is shipped in 55 gallon drums, 350 gallon and 550 gallon stainless steel tote tanks. A Material Safety Data Sheet outlining recommended safe handling of **DSC Gold Surf S** is available upon request.