



Just The Right Chemistry

TECHNICAL DATA SHEET

DSC GOLD SURF Displacement Additive

Outstanding Characteristics

Ideal for lowering surface and interfacial tensions

Description

DSC Gold Surf is a concentrated blend of non-ionic surfactants and special alcohols. **DSC Gold Surf** is designed to lower surface and interfacial tensions so that **DSC Gold Surf** can penetrate the synthetic oil or oil base drilling fluid wall cake and residue, thereby allowing them to be circulated out and completely removed from the wellbore during the displacement process.

Application:

DSC Gold Surf has the ability to diffuse the surface of a liquid, absorb 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** works by orientating its polar and apolar head and tail groups at the liquid/liquid interface. When present in sufficient quantities, **DSC Gold Surf** 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** present when micelle formation occurs is characteristic of the critical micelle concentration or "CMC" of the solution. Adding more **DSC Gold Surf** past the CMC can not only destroy the effectiveness of the **DSC Gold Surf**, but significantly increase the cost of the displacement. **DSC Gold Surf** is appropriate for a wide variety of brine types and completion fluids.

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

Shipping And Handling Instructions:

DSC Gold Surf 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** is available upon request.



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DSC VIS Viscosifier and Fluid Loss Control Additive

Description:

DSC VIS is a modified non-ionic natural polymer composed of pure hydroxyethyl cellulose (HEC).

Application:

DSC VIS can be utilized to viscosify fresh and brine waters such as sodium chloride, potassium chloride, sodium bromide and calcium chloride. **DSC VIS** has all the viscosity building properties of natural gums and guar, but is not adversely affected by bacteria, polar compounds, divalent metal ions (i.e. Ca⁺²) or cement. With good mixing equipment, this product usually can be used to build high viscosities in low density brine waters. However, with poor mixing equipment, or poor agitation, there is the possibility of developing "fisheyes" (polymer that has not been completely wet and forms a ball or eye-shaped solid. This solid mass will not mix and is potentially damaging to the formation). If high densities are mandated or if the need for elevated viscosity is needed in higher density brines then **DSC HEC LINEAR GEL**, which is liquid HEC, should be used. Each HEC granule has been prewet with a hydrocarbon allowing the product to lose this coating slowly and assume the proper wetting rate, eliminating the possibility of fisheyes.

Like **DSC HEC LINEAR GEL**, **DSC VIS** is also acid soluble, enzyme degradable. A wide variety of breakers are also available. **DSC VIS** begin to thermally degrade at approximately 200°F. As with **DSC HEC LINEAR GEL**, this product can be stabilized to maximum temperature of 300°F with varying concentrations of **DSC EXTENDER-75**.

Recommended treatment is .5 to 3 lbs. per barrel



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DSC GOLD FLUSH II **Wellbore Displacement and Cleanup Additive**

Outstanding Characteristics:

Concentrated eco-friendly penetrating cleaner used to displace both Oil and Synthetic Oil Muds.

Description:

DSC GOLD FLUSH II is a versatile, highly effective solvent used for the complete removal of oil base and synthetic drilling fluids and residue from the work string and wellbore. **DSC GOLD FLUSH II** can be used to flush mud lines, surface pits and equipment prior to the displacement of water base muds, brines and completion fluids. When used in conjunction with **DSC GOLD SURF I**, **DSC GOLD FLUSH II** is especially effective in a cased hole environment prior to gravel packing and completion operations.

Application:

For precise removal of (and elimination of damage from the oil base or synthetic drilling fluid residue) oil base and synthetic oil base drilling fluids and residue from the wellbore. Since the displacement of and complete removal of these fluids is designed by the pump rate, contact time and saturation factor, each treatment or application is specifically designed on a well by well basis. Our customer support staff can input your well data and provide our recommended cleaning program for your specific well design.

Shipping and Handling Instructions:

DSC GOLD FLUSH II 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 II** is available upon request.