



TECHNICAL DATA SHEET
April 1, 2011

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 Flush** 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. The shelf- life of **DSC Gold Surf** is more than 5 years when stored at a temperature range of 70°F to 90°F.