



TECHNICAL DATA SHEET  
April 1, 2011

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**DSC GOLD SURF S**  
Displacement and Stimulation Additive

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**Outstanding Characteristics:**

Ideal for lowering surface and interfacial tensions. It is a very strong water wetting agent at very low concentration in light brines and seawater.

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**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 it 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.

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**Application:**

The unique abilities of **DSC Gold Surf S** are 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, which are formed on casing walls. **DSC Gold Surf S** works by orientating its polar and non-polar 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** (about 3-5%) is very critical in the micelle formation; adding more **DSC Gold Surf S** past the Critical Micelle Concentration can not only destroy the effectiveness of the **DSC Gold Surf S**, but also significantly increase the cost of the displacement.

**DSC Gold Surf S** is appropriate for a wide variety of brine and completion fluid types, but it is extremely effective in light brines.

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**.

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**Shipping And Handling Instructions:**

**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.