



TECHNICAL DATA SHEET
April 1, 2011

DSC Friction Reducer (Liquid)

Description:

DSC Friction Reducer is a polymer based drag reducer in liquid form. It has been specifically developed for drag reduction applications in aqueous systems. **DSC Friction Reducer** functions by reducing frictional drag due to turbulent flow at or near the pipewall.

Application:

DSC Friction Reducer is designed to be applied neat. It should be injected into the well or flow line in a continuous basis. The required dosage will typically be in the range of 0.1% to 0.2%, which is equivalent to 5 to 10 gallons **DSC Friction Reducer** per 100 barrels. A short trial evaluating a range of dosages is normally sufficient to assess the potential for drag reduction and select the optimum dosage.

Cleaning of equipment: To avoid plugging of pumps and injection lines it is recommended that a hydrocarbon based solvent such as diesel or low toxicity mineral oil is used to prime or flush pumps and lines.

Principal uses: **DSC Friction Reducer** can be used to increase flow rates in water injection wells and flow lines. Increases in flow rate of up to 40% may be possible, depending on pipe dimensions, pressures and flow rates.

Technical Service:

Advise on the application of **DSC Friction Reducer**, selection of injection points, dosing pumps etc., is available from specialists in the Oil Services Division.

On site assistance for both laboratory and plant scale evaluations of Deep South Chemical, Inc. products is provided by representatives experienced in oil services provided by representatives experienced in oil services applications. They will provide advice on the selection of the appropriate products and assist in the design of any equipment associated with the use of Deep South Chemical, Inc. detergents.

Typical Properties:

Appearance:	White liquid	Viscosity (Brookfield, 20°C):	300 cP
Specific gravity:	1.10	Pour Point:	Below 10°C

Shipping And Handling Instructions:

DSC Friction Reducer is available in 5 gallon pails. A Material Safety Data Sheet outlining recommended safe handling of **DSC Friction Reducer** is available upon request.