

## TECHNICAL DATA SHEET April 1, 2011

# DSC HEC LINEAR GEL Liquid Viscosifier

### Description:

**DSC HEC LINEAR GEL** is a specially formulated liquid viscosifier using nonionic, high molecular weight, hydrophilic polymer and a water-miscible, polar, organic liquid which acts as a solvating agent for the polymer.

#### Application:

**DSC HEC LINEAR GEL** is a non-damaging viscosifier designed for use in fresh water, Sodium Chloride, Potassium Chloride, Sodium Bromide, and Calcium Chloride. It may be used in Calcium Bromide and Zinc Bromide solutions with special procedures. The product is readily dispersible in all brine systems and easier to use than dry HEC. It is soluble in Hydrochloric, Acetic and Formic acids and degradable at temperatures above 225°F.

Depending upon desired viscosity, a concentration of 1 to 4 gallons of **DSC HEC LINEAR GEL** per barrel of fluid is recommended. See chart reverse page. These illustrate the amount of **DSC HEC LINEAR GEL** to use in various fluids. **DSC HEC LINEAR GEL** should be poured slowly into a hopper or agitated fluids. In a sodium-based system, maximum viscosity will be achieved by a pH in the 7-9 range.

CAUTION: Less than one pound of Sodium Hydroxide per 100 barrels of fluids usually will change the pH of a sodium system from 7-9.



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### MARSH FUNNEL VISCOSITY, SEC/QT VS CONCENTRATION

Number of 5 Gal. Calcium	Sodium		
Pails per 100 Barrels of Water	Fresh <u>Water</u>	Chloride 9.6 Lb./Gal.	Chloride 11.6 Lb./Gal
4	32	32	38
5	34	34	40
6	37	38	42
7	38	39	43
8	42	43	46
8	42	43	46
9	45	46	50
10	48	49	60
11	50	51	82
12	58	59	148
13	67	69	300+
14	70	72	400+
15	87	90	High
16	100	105	High

#### **ILLUSTRATIVE EXAMPLE**

A 39 sec/qt marsh funnel viscosity is desired in a Sodium Chloride water. Under the Sodium Chloride column, move down to the number closest matching the viscosity desired and then move your attention to the left column. Read the number of gallons of **DSC HEC LINEAR GEL** needed to viscosity the water for every 100 barrels.