Product Data Sheet

INICOR W142

Sirius-ES drilling fluids

1. Chemical Description

INICOR W142 is a liquid, water soluble corrosion inhibitor based on alkoxylated imidazoline.

2. Main Use

INICOR W142 is a corrosion inhibitor designed for general purpose protection of a wide range of petroleum and petrochemical processing systems. It is particularly suited to control H2S corrosion, carbon dioxide and dissolved salts corrosion.

3. Typical Values

Appearance: amber liquid
Specific gravity at 20°C: 1.05
pH (as is): 11
Pour point: -8°C
Properties are typical and subject to manufacturing tolerances.

4. Product Properties

STATIC CORROSION TEST:

- corrosion inhibitor dosage: 1 ml/L
- fluid system: **Calcium Chloride** 1,4 SG (40% w/w)
- aging conditions: T=150°C; N2=250 psi
- steel bars: AISI-4140.

	% protection after 28 days @ 150°C
CaCl2 brine (1,4 SG)	**67**

Corrosion tests run using the technique of Linear Polarization Resistance (**LPR**):

- corrosion inhibitor dosage: 2.5 ml/L, 5ml/L and 10 ml/L.
- fluid system: 4% **Sodium Chloride** solution
- temperature: 50°C
- dissolved gas: CO2

Average corrosion rate values and average imbalance values (between 17 and 20 hours) for each concentration are reported in the tables below:

CORROSION RATE (MPY)		
Concentration (ml/l)	BLANK	INICOR W142
2,5	143.89	1,79
5,0		1,10
10,0		0,38

IMBALANCE (Pitting Units)		
Concentration (ml/l)	BLANK	INICOR W142
2,5	2.2	0,5
5,0		0,06
10,0		0,28

5. Applications

INICOR W142 inhibits the corrosion by forming an persistent film over metal surfaces.
INICOR W142 can be injected into the system continuously and undiluted.

Treatment dosage is best determined with pilot tests as the optimum dosage varies depending on the type of system and corrosivity of the fluids (i.e. salinity, pH, temperature, oxygen and acid gases content).
INICOR W142 is normally applied at 2.5-10 g/L (0.87 -3.5 ppb).

Pilot testing is suggested to determine the actual treatment required to obtain the desired result.

6. Packaging

55 US gal non returnable plastic drums, palletized, strapped and stretch-hooded (4 drums per pallet)