



FinoPAC

CT Corrosion Inhibitor

Description

FinoPAC is comprised of combinatorial chemistry consisting of filming amines, quaternary ammonium compounds and oxygen scavenger. It is a multifunctional additive that functions as corrosion inhibitor, bactericide, and oxygen scavenger and designed for use in coiled tubing fluids, workover fluids, packer fluids and completions fluids. FinoPAC performs as a corrosion inhibitor by preferentially adsorbing a thin molecular film on all metal surfaces, thereby stifling the corrosion process.

Typical Physical Properties

| Characteristic | Specification | | |
|----------------|--------------------|--|--|
| Appearance | Dark liquid | | |
| Active | 20% | | |
| Density | ~8.5 lbs per ga | | |
| Flash Point | > 200°F | | |
| Pour Point | 25°F | | |
| Solubility | Water and Methanol | | |

Applications

FinoPAC is also available as a concentrate which can be diluted 4 times in water. It can also be diluted in alcohol/water or alcohol/glycol if required. FinoPAC is typically batch treated at a rate of ½ to 1½ gallons per 10 barrels.

Packaging

FinoPAC is available in 55 gallons drums, 275 or 330 gallon totes.

Handling

Please refer to the Safety Data Sheet for further handling information.

Availability

Global from Houston, TX-USA, Midland, TX-USA, Dubai, UAE, and Bombay, India.

Performance Data

Corrosion tests were performed with FinoPAC using 1018 steel coupon, under saturated CO₂ environment for 24 hours at 280°F. The brines tested were 9.3 ppg NaCl and 10.5 ppg CaCl₂. The data are shown in Tables 1 and 2 and Figures 1 through 8. The corrosion data does not look good because the tests were performed under very harsh conditions (saturated CO₂). It is highly unlikely the CT or packer fluids would be saturated with CO₂. Under normal packer fluid environment, FinoPAC should perform better.



| Test Conditions: 10.5 ppg CaCl2, CO2 Saturated, 24 Hrs at 280 °F | | | | | | | |
|--|---------------|--------------|-------|--------------------|--|--|--|
| Test | Wt. Loss, mg. | % Protection | MPY | Additive (FinoPAC) | | | |
| 1 | 22.6 | 56.5 | 97.6 | FinoPAC 50 ppm | | | |
| 2 | 24.8 | 52.3 | 107.1 | II | | | |
| 3 | 20.9 | 59.8 | 90.3 | 100 ppm | | | |
| 4 | 25.3 | 51.3 | 109.3 | 11 | | | |
| 5 | 15.9 | 69.4 | 68.7 | 150 ppm | | | |
| 6 | 13.8 | 73.5 | 59.6 | 11 | | | |
| 7 | 53.4 | 0.0 | 230.6 | Blank | | | |
| 8 | 50.6 | 0.0 | 218.5 | II | | | |

| Test Conditions: 9.3 ppg NaCl, CO2 Saturated, 24 Hrs at 280 $^{\circ}$ F | | | | | | | |
|--|---------------|--------------|-------|--------------------|--|--|--|
| Test | Wt. Loss, mg. | % Protection | MPY | Additive (FinoPAC) | | | |
| 1 | 20.8 | 60.3 | 89.8 | FinoPAC 50 ppm | | | |
| 2 | 24.6 | 53.1 | 106.2 | 11 | | | |
| 3 | 16.7 | 68.1 | 72.1 | 100 ppm | | | |
| 4 | 18.2 | 65.3 | 78.6 | II . | | | |
| 5 | 15.8 | 69.8 | 68.2 | 150 ppm | | | |
| 6 | 16 | 69.5 | 69.1 | II . | | | |
| 7 | 47.8 | 0.0 | 206.4 | Blank | | | |
| 8 | 56.9 | 0.0 | 245.8 | 11 | | | |



Figure 1. 10.5 ppg CaCl₂ with and without FinoPAC

Figure 2. 9.3 ppg NaCl without and with FinoPAC