

# CONQOR 404 EH

## Phosphate-base corrosion inhibitor

### ADVANTAGES

- Compatible with anionic foamers
- Highly effective against oxygen corrosion caused by dissolved oxygen
- Low toxicity
- Minimum impact on fluids rheology
- Effective in waters from fresh to saturated salt water
- Effective in aerated fluids such as those used in air-drilling operations
- Effective to temperatures in excess of 350 degF [177 degC]
- Does not require an oxygen scavenger

CONQOR 404 EH\* phosphate-base corrosion inhibitor is an all-purpose, water-soluble organophosphate compound. It is a passivating type of corrosion inhibitor used to prevent corrosion on metal surfaces.

CONQOR 404 EH inhibitor is used as a corrosion inhibitor for low solids, no-dispersed water-base polymer drilling fluids, brine water systems, as well as air, mist, and foam fluids. It is effective at relatively low concentrations such as 2.5 galUS/100 bbl [0.6 L/m<sup>3</sup>]. CONQOR 404 EH inhibitor is well suited for applications where calcium scale deposition is a problem, and is especially effective in highly aerated fluids such as underbalanced drilling operations.

Typical recommended treatment of CONQOR 404 EH inhibitor is 2.5 galUS/100 bbl [0.6 L/m<sup>3</sup>] of makeup fluid depending on anticipated conditions, other chemicals used in the system, and the corrosive environment (e.g., salinity, pH, temperature, oxygen content, and acid gases). If the corrosion rate is unacceptably high, the concentration should be increased to at least 7 galUS/100 bbl [1.7 L/m<sup>3</sup>]. For aerated systems, an initial treatment of 12 galUS/100 bbl [2.9 L/m<sup>3</sup>] is recommended. The product should be evenly dispersed throughout the circulating mud system and can be added either through the chemical barrel or directly to the mud pits wherever good agitation occurs.

The corrosion rates should be monitored at all times with corrosion coupons and treatments should be adjusted according to their analysis. A good corrosion-control program includes a thorough makeup-water analysis, chemical treatments for corrosive contaminants, and an adequate bacterial control for systems that contain biodegradable additives.

### Typical Physical Properties

Physical appearance	Clear yellow liquid
Specific gravity	1.43–1.44
pH of 5% solution	7–8.5
Flash point	>200 degF [>93 degC]
Pour point	–10 degF [–23 degC]

### Limitations

- Not compatible with formate brines or fluids
- Not compatible with soluble hardness
- Should not be used in packer fluids or other situations where the fluid will not be circulated nor on racked pipe.
- Should not be diluted with alcohol.

### Toxicity and handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheet (MSDS).

### Packaging and storage

CONQOR 404 EH inhibitor is packaged in 55-galUS [208-L] epoxy-lined steel drums and in 5 galUS plastic pails. It is not a DOT regulated material.

Store in a dry, well-ventilated area. Keep container closed. Keep away from heat, sparks and flames. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping, and/or stacking.