KemGuard® 3015 Scale Inhibitor

HIGHLY EFFECTIVE, MULTI-COMPONENT SCALE INHIBITOR FOR CONTROLLING CALCIUM SCALE FORMATION, METAL OXIDE DEPOSITION AND SUSPENDED SOLIDS DISPERSION

KemGuard® 3015 technology provides outstanding scale inhibition properties, especially in severe conditions such as high hardness, high temperature, high total dissolved solids and in recycled waters.

KemGuard 3015 technology is formulated to provide scale inhibition for a wide range of salt precipitates. Our product is especially effective in oilfield conditions with high calcium ion concentration and propensity of calcium ion to precipitate and form scale. Complete inhibition can be achieved at 150 times calcite saturation and above, where other common inhibitors fail. It has dispersing capabilities that prevent the salt sweeping effect. An added benefit is the ability of KemGuard 3015 scale inhibitor to effectively treat calcium phosphate and its unique tolerance to calcium ions. The product retains its ability to treat calcium scale in high brine concentrations and is more thermally stable than typical organophosphates or polyacrylate scale-inhibitors. It retains its effectiveness above 180°C.

KemGuard 3015 antiscalant provides outstanding product performance including: CaCO3 and CaSO4 scale inhibition, deposit control in very high-water hardness, pH and alkalinity environments, effective control of BaSO4 scale, meta–oxide stabilization, orthophosphate–deposit control and dispersion of suspended solids.

KEY BENEFITS

- EFFECTIVE FOR CALCIUM CARBONATE, SULFATE, & PHOSPHATE
- HIGHLY TOLERANT TO CALCIUM IONS
- IMPROVED PERFORMANCE IN HIGH STRESS CONDITIONS
- EFFECTIVE AT OVER 150X CALCITE SATURATION
- IMPROVED THERMAL STABILITY

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Dynamic Tube Blocking test results in Heidrun fresh water at moderate Stiff Davis saturation conditions (1 hour, 30°C, 1000 PSI) show a performance benefit using KemGuard 3015 antiscalant in reaching Minimum Inhibitor Concentration (MIC). Competing chemistry is di-ethylene-triamine-pentamethylene-phosphonic acid (DETPMP). A dosage reduction of over 60% based on active PO4 was achieved.

Dynamic Tube Blocking test results for Shearwater fresh water at severe Stiff Davis saturation conditions (2 hour, 38°C, 250 PSI) show a performance benefit using KemGuard 3015 antiscalant versus DETPMP to reach the MIC. A reduction of over 80% based on active PO4 was possible.