

D620 GASBLOK

High-efficiency gas migration control additive

APPLICATIONS

- Control of gas migration in temperatures from 150 to 300 degF [66 to 149 degC] for primary and remedial cementing
- Wells with a narrow window between pore and fracture pressure

BENEFITS

- Reduced HSE footprint
- Easy to mix and pump using standard field equipment
- High efficiency

FEATURES

- Compatible with CemCRETE* concrete-based oilwell cementing technology, FlexSTONE* advanced flexible cement technology, CemFIT* adaptive cement systems, and standard Schlumberger cement additives
- Easy pumping due to low rheology, resulting in reduced cement slurry friction loss
- Formation of low-permeability plastic film to prevent gas movement
- Improved cement bonding to formation and casing
- Excellent fluid loss control

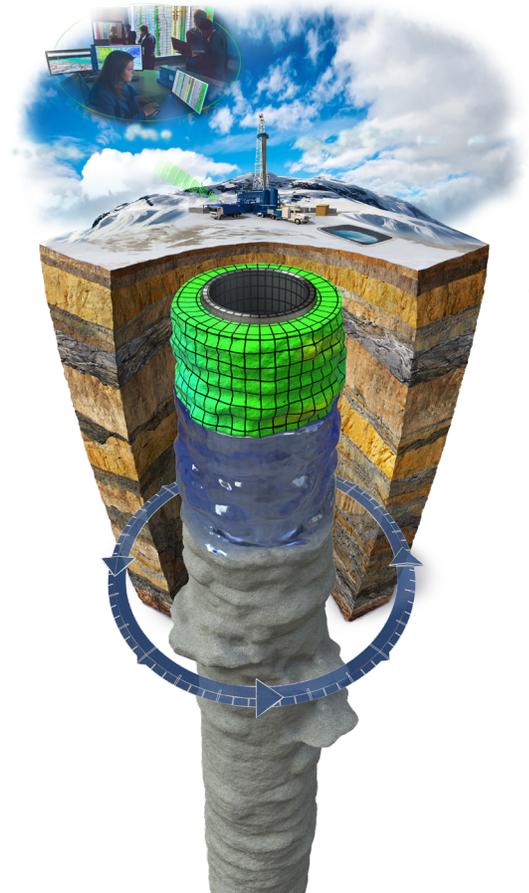
D620 is a new-generation system that creates an impermeable barrier to prevent annular gas migration into cement slurry during the critical hydration period. Compared to other gas migration control additives for intermediate temperatures, D620 GASBLOK* gas migration control additive is more efficient.

The additive is an aqueous dispersion of solid polymer particles, including surfactants and protective colloids that improve dispersion and add stability. While cement is setting, the latex forms an impermeable film reducing the permeability of the matrix. When formation gas enters the cement slurry due to a drop in hydrostatic pressure, the latex particles coalesce to form a coherent, low-permeability plastic film in the pore spaces between the cement grains that blocks further migration into the cement.

D620 GASBLOK additive also controls gas migration by improving the cement bond to the casing and formation interfaces. Moreover, it creates a thin, low-permeability filtercake to reduce fluid loss from the cement slurry.

The appropriate concentration of the additive needed to block gas migration depends on bottomhole circulating temperature (BHCT) and slurry volume fraction. Applications can be designed using freshwater or seawater.

This additive can be used at BHCTs from 150 to 300 degF [66 to 149 degC] and in slurries with densities ranging from 8 to 23 lbm/galUS [960 to 2,760 kg/m³]. With proper lab testing, it is possible to use the system outside the preferred density range.



D620 GASBLOK additive prevents gas migration during intermediate-temperature primary and remedial cementing.