

SAFE-LINK 110

Completion fluid loss control agent

APPLICATION

Controlling loss of brine to the formation in perforated completions

BENEFITS

- Deposits viscous shield to block flow of brine to formation
- Streamlines operations and reduces rig footprint
- Requires no special mixing equipment
- Cleans up with diluted acid

FEATURES

- Formulated with chemically modified, crosslinked cellulose polymer
- Delivered premixed
- Prepared in approximately 11.0-lbm/galUS [1.32-kg/m³] calcium chloride brine
- Rated to 250 degF [121 degC] and 1,000-psi [6.89-MPa] differential pressure

The SAFE-LINK* 110 completion fluid loss control agent comprises a chemically modified, crosslinked cellulose polymer that controls loss of clear-brine fluid to the formation during completion or workover operations. The agent applies an extremely viscous material across the formation face, blocking the flow of brine into the formation.

Single-pill fluid loss control in multiple brines

The agent is prepared in approximately 11.0-lbm/galUS calcium chloride brine and works effectively in nonzinc halide brines— including calcium bromide, sodium chloride, seawater, sodium bromide, and potassium chloride— with densities ranging from 8.6 to 15.1 lbm/galUS [1.03 to 1.81 kg/m³]. The SAFE-LINK 110 agent may be mixed in brine or with a viscous hydroxyethyl cellulose (HEC) polymer carrier.

Because the agent functions through a crosslinked polymer network that is held in place on the formation face, its effectiveness is not dependent on bridging solids or viscous drag within the formation matrix. At recommended treatment levels, the fluid loss to moderately permeable formations (100–1,000 mD) can be eliminated. A 10-bbl [1.59-m³] pill is the minimum recommended treatment.

Flexible premixed formulations

SAFE-LINK 110 agent is one of three products within the SAFE-LINK agent portfolio, along with the SAFE-LINK 135 and SAFE-LINK 140 agents. In each, the active component consists of an HEC polymer formulated in approximately 11.0-lbm/galUS, 13.5-lbm/galUS [1.62-kg/m³], and 14.0-lbm/galUS [1.68-kg/m³] brines, respectively. The appropriate SAFE-LINK agent should be chosen based on the required pill density. SAFE-LINK agents arrive to location premixed, simplifying rigsite operations and reducing the overall footprint. Engineering guidelines for mixing instructions are available upon request.

Typical Physical Properties

Physical appearance	Gelatinous solid
Color	White to beige
Relative density	1.32

Toxicity and handling

Bioassay information is available upon request. Handle as an industrial chemical, wear protective equipment, and observe the precautions described in the Material Safety Data Sheet (MSDS).

Packaging and storage

SAFE-LINK 110 agent is packaged in 5-galUS [19-L] pails and in 14- or 24-bbl [2.20- or 3.77-m³] bulk delivery systems.