BRIDGE PLUS

Lost Circulation Material

Product Description

BRIDGE PLUS is a granular graphite/ coke blend. It is a chemically inert, sized plugging agent used to bridge and seal porous and fractured formations in water, oil, or synthetic-based drilling fluids.

When drilling in depleted zones exposed to high differential pressures, the bridging and plugging capabilities of BRIDGE PLUS can help to reduce the potential for stuck pipe.

BRIDGE PLUS is chemically inert and will not affect the rheological properties when used at recommended concentrations.

Typical Physical Properties

Physical appearance Dark gray to black powder

Specific gravity 1.9 - 2.1Solubility in water@20°C Insoluble Median Particle Size (d_{50}) $100-300 \, \mu m$

Application

When used alone or in blends with other lost circulation materials, facilitate fracture bridging, effectively dissipating fracture energy and preventing fracture propagation.

The recommended treatment for seepage losses (up to 1.6 m³/hr or 10 bbl/hr) is 43 to 57 kg/m³ (15 to 20 lb/bbl) in spotted pills. The pills can be incorporated into the entire system for a total concentration of 10 to 20 lb/bbl (29 to 58 kg/m³), but close monitoring of the shakers is required. The recommended treatment for partial losses (1.6 to 16 m³/hr or 10 to 100 bbl/hr) is 57 to 143 kg/m³ (20 to 50 lb/bbl) in spotted pills.

Can be removed from the circulating system by shale shakers and solids-control equipment. Requires close monitoring of the shale shakers

Non-acid soluble material may not be suited for open-hole completions in which acid solubility is required

<u>Advantages</u>

- Effective bridging and sealing agent for a wide range of formations and severity of losses
- Controls seepage losses, thereby reducing the possibility of differential sticking
- Reduce torque and drag in all mud systems
- Inert material with no adverse effects on mud rheology
- Temperature-stable to more than 500°F (260°C)
- One-sack product that is easily mixed and dispersed into any fluid system
- May be used in combination with other additives, particularly lost circulation materials

Packaging and Storage

BRIDGE PLUS additive is packaged in 55-lb (25 kg), multi-wall paper sacks. Store in a dry location away from sources of heat or ignition, and minimize dust.

Important Note: These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and method of use of our product are beyond our control. We recommend that the prospective user determine the suitability of our material and suggestions before adopting them on a commercial scale.