

STAR SHIELD® 500

PRODUCT SPECIFICATIONS

Description

STAR SHIELD 500® Wellbore Stabilizer is a versatile solution designed for reliable wellbore stability in a variety of onshore drilling conditions. With an optimized particle size distribution, it effectively seals fractures of various sizes, creating a durable, low-permeability barrier that minimizes fluid and pressure invasion. Ideal for applications where standard stabilizers may be insufficient, STAR SHIELD 500 adaptability allows for continual circulation within the fluid system, reducing the risk of differential sticking and enhancing drilling efficiency, even in challenging environments such as high-pressure or mechanically unstable formations.

Advantage

- *Designed for challenging well construction, enabling operators to drill with fluid densities greater than the fracture initiation pressure.*
- *Eliminates differential sticking in high-permeability formations.*
- *Shear resistant and has a broad particle size distribution.*
- *High-temperature stability over 204°C (400°F).*

APPLICATION

Seals fractures up to 500 µm, even under high differential pressures.

Solid control API mesh screens may require slight adjustments to maintain the product within the fluid system.

Effective in water-, oil-, and synthetic-based drilling fluid systems.

ENVIRONMENTAL ADVANTAGE

Environmentally compliant for use across all regions in North America.

Meets the North American 96-hour LC50 bioassay standard for mysid shrimp.

TREATMENT RECOMMENDATIONS

Effective at concentrations as low as 3–10 lb/bbl.

Designed for use in the circulating fluid system.

Concentration can be monitored using Impact's proprietary Sand Bed Tester.

PHYSICAL PROPERTIES

Appearance: Light tan powder

Specific Gravity: 1.4–1.5 g/cm³

Composition: Free of graphite, asphalt, Gilsonite, or other black powder-based materials

HANDLING AND STORAGE

Storage: STAR SHIELD 500 should be stored in a dry environment. Avoid creating excessive dust and inhalation. Use appropriate PPE, and review the SDS before use.

PACKAGING

STAR SHIELD® 500 is available in 25-lb multi-walled bags, with 48 sacks per pallet.

