

STAR SHIELD®

PRODUCT SPECIFICATIONS

Description

STAR SHIELD® Wellbore Stabilizer and Shielding Technology is a proactive solution designed to help operators successfully drill in challenging onshore formations. This Wellbore Shielding® product protects formations by minimizing fluid and pressure invasion into matrix pores and microfractures, creating a protective “shield” at the rock-fluid interface. STAR SHIELD provides a distinct drilling advantage and has been widely adopted by major operators in unconventional shale plays.

Advantage

- *Used in challenging well construction sections to enable operators to drill with drilling fluid densities greater than the fracture initiation pressure.*
- *Eliminates differential sticking in high-permeability formations.*
- *Does not shear degrade and has a broad particle size distribution.*
- *High-temperature stability over 204°C (400°F).*

APPLICATION

Seals fractures up to 250 µm, even under high differential pressures.

Designed to perform seamlessly in circulating systems with API 70 mesh screens, ensuring consistent operation and fluid flow.

Versatile and effective across 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 4–12 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: 1.6–1.7 g/cm³

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

HANDLING AND STORAGE

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

